Energy Security Under the Context of Critical Security Studies. The Importance of the Barents Region to the European Union

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Abstract

The aim of this PhD thesis is to examine, with specific reference to the Barents Sea Region, how critical security studies can facilitate analysis of the emerging relationships between the EU, Russia and Norway in the Arctic. Specifically, in what ways can critical security studies be applied to the energy security of the EU in relation to Norway and Russia? To what extent do the energy reserves of the Barents Region create inter-relations between Norway, Russia and the EU? And in what ways can contemporary critical security studies be used to support the development of international policies that can support sustainable development in the Barents Region? The thesis is composed of ten chapters, each of them dealing with different aspects of human geography. Chapter One is introductory and defines the context of the research. Chapters Two, Three and Four form the extensive literature review, while Chapter Five outlines the contemporary history of the Barents Region. Methodological approaches and the justification for their selection are presented in Chapter Six. Chapters Seven, Eight and Nine are the results chapters, dealing with critical security studies, the role of the Barents Region in energy security issues of the EU, and environmental and societal security in the Barents Region, respectively. Conclusions are drawn in Chapter Ten, where I return to each of the research questions and discuss the contribution of the thesis to our empirical knowledge, policy and practice.

Keywords: Arctic, Barents Region, Barents Sea, Norway, European Union, Russia, Energy Security, Human Security, Environmental Security, Critical Security Studies, Copenhagen School of Thought, Welsh School of Thought, Geopolitics.

Contents

Maps, figures and tables

Abbreviations

ASEAN: Association of Southeast Asian Nations

BEAC: Barents Euro-Arctic Council

BCM: billion cubic meters

CIS: Commonwealth of Independent States

EC: European Commission

EU: European Union

MEP: Member of the European Parliament

MMboe: Millions Barrels of Oil Equivalent

NATO: North Atlantic Treaty Organization

NS: Nord Stream

NS II: Nord Stream 2

Chapter 1

Introduction

1.1 Setting the Scene

The Arctic is a vast storehouse of energy reserves that is thawing, with numerous consequences for global society. From the environment and indigenous populations to the newly settled frontiers (Norway and Russia) and claims to land (Canada and USA), the Arctic landscape is changing quickly, with a profound impact on a planet that is being challenged. The peaceful landscape of the Arctic hides differences and alliances between nations and organisations. As the changes progress, these political relationships will be tested further, and strategies are needed to manage the evolving situation.

Map 1: The Barents Region

(Arctic Centre, University of Lapland, 2018)

New developments in the region and the factors that affect the ever-changing reality (climate change, new sources of gas and oil, indigenous populations, new navigation paths, fishing areas, new military bases and agreements between multinational companies) mean that the Arctic holds many questions and new areas of scientific research. A massive environmental disaster or a military conflict in the Arctic would be disastrous for global society, so there is a need to develop strategies for peaceful and sustainable development of the region that take into account all parameters. In addition, if strategies are successfully developed, they could be adapted for application to other similar problem areas. In this project, I aim to provide a clear picture of the new problems that are developing in the region through a study of modern and constantly evolving factors, using my background as a geographer to analyse a combination of problems and conduct thorough and comprehensive research to add to the rich literature in the field.

Building on the work of critical security studies, this project explores emerging geopolitical tensions in the Arctic through the concept of energy (in)security (Peoples & Vaughan-Williams, 2010). As Barry Buzan first said, a security analyst has to think beyond military and war threats, including environmental, economic, societal and political sectors (Buzan B. , 1991). In my research, I analyse the concept of energy insecurity, as it can cause the same damage as an armed conflict and it is considered as a prominent danger for the European Union.

According to Ken Booth, "*Security means the absence of threats. Emancipation is the freeing of people from those physical and human constrains which stop them carrying out what they would freely choose to do.* …" (Booth K. , 1991, p. 319). I argue that energy insecurity is one of those constraints. Consequently, I believe that for human societies within the states of the European Union (EU) to be energy secure, we must minimise the threat of energy insecurity. In my research, I analyse and evaluate the degree to which the principle of emancipation could apply to the energy security of the EU.

The other aspect of critical security studies that I consider is the degree to which securitisation theory (Copenhagen School of International Relations) could apply to the field of energy security. Previous analysis of securitisation has focused on the environmental,

economic, societal and political sectors, but not on the energy sector, thereby leaving a gap in the literature between the sector of energy security under the scope of securitisation theory. Relationships between energy availability, accessibility, affordability and acceptability lead to an existential threat to contemporary human societies, which generates the need for securitisation. In addition, energy insecurity threatens industry, technology, development and science. Application of the Copenhagen concept of securitisation to energy remains underexplored. With my research, I seek to identify the connections between energy security and securitisation theory, and the options for better policy analysis.

Finally, I examine the insecurities faced by Arctic populations that reside in the Barents Region, and the ways in which their societal security is threatened by climate change. By again applying the concept of critical security studies, I examine the contemporary challenges that those populations must endure and adapt to, and how they could be adequately protected in a globalised Arctic environment.

1.2 Introducing the study

The study was conducted independently in 2015, but from 2016 it was funded by the ESRC Wales Doctoral Training Partnership. My research focuses on the energy security of the European Union (EU) and how this could be guaranteed by the provision of natural gas from the Arctic region, especially from the Arctic reserves of Norway and Russia. I focus on these two countries and on the EU as an institution that is seeking energy security. The main question that needs to be answered is how the EU can ensure the smooth flow of sufficient natural gas from these exporters. An additional question is how infrastructural technologies and natural gas flows could create and sustain political arrangements and modes of governance among the EU, Norway and Russia. I also explore the insecurity that local populations of the Barents Region are facing as a result of escalating climate change.

Marginalised populations within the EU and local populations within the Barents Region – indigenous and non-indigenous – are important aspects of this study, as my research goes deeper than the state level and involves analysis of broader issues than military security.

Development of energy projects and new policies that relate to energy affect those populations. My research highlights the energy insecurities of the marginalised and impoverished communities and individuals within the EU, which in most cases differ from the energy insecurities that threaten the majority of the population of the EU states and the state per se. I examine the population of the Barents Region depth, as this region is the major site of the research. In particular, I focus on the way in which indigenous populations live and the risks that environmental changes and industrial developments pose to their communities. Even if the political analysis in this research does not enable the direct proposal of policies for those vulnerable communities in the EU and the Barents Region, it brings to our attention the complexities of energy, environmental and human security and how these affect the less privileged members of our society.

Arctic resources can contribute to an increase in European security as far as energy and raw materials are concerned. Exploitation of these resources, however, will be slow because of the inherent difficulties of extracting resources from the region, including high costs due to the severe weather conditions and the multiple environmental risks (European Commission, 2008). There are a number of studies on the upcoming changes in the Arctic at the environmental, societal, political and economic level, including the works of (ACIA, 2004) (Anisimov, et al., 2007) (Berkman & Young, 2009) (Huebert, Pirot, Lajeunesse, & Gulledge, 2010) (Fairhall, 2010) (NSIDC, 2011) (Emmerson, 2011) (Stokke O. S., 2011) (Fothergill & Berlowitz, 2011) (Harvey F. , 2012) (David, 2013) (Reardon, 2013).

The energy demand of the EU has been extensively studied. The European Commission reported in 2007 that the EU imports 26% of gas and 29% of oil from Russia (Commission of the European Communities, 2007a). From 2002 to 2010, the Russian share of the EU imports declined from 45.2% to 29.5%, although there was an increase in 2011 and 2012 (European Commission, 2014). In 2013 Gas consumption in Europe reached 462 billion cubic metres, or 511 billion if Turkey and Switzerland are included (Eurogas, 2014). In 2013, Gazprom, a large Russian company majority owned by the Government of Russia which conducts extraction, production, transport, and sale of natural gas, covered 30% of the European demand for natural gas (Gazprom, 2014) (EIA, 2014). Belkin & Morelli (Belkin & Morelli, 2007) have described not only the high dependence of the EU on oil and gas from Russia and Norway,

but also the vast amount of energy that these two countries possess. Offerdal (Offerdal, 2010) has also argued that the EU is trying to increase the power of its energy policy, and in order to do this, the EU must take into account these facts and promote cooperation among its importers (Aalto & Tynkkynen, 2008) & (Norwegian Ministry of Foreign Affairs, 2010), as well as including efficient and sustainable use of any kind of energy or raw material in its energy security policy (Klare, 2013, p. 551). In addition to energy security, the EU also has environmental security as a primary goal. The EU has to cope with scarcity of fossil fuel energy, economic globalisation and climate change policy in order to manage its dependency on imported energy sources and, at the same time, reduce the carbon emissions of the member states (Bradshaw, 2010). In effect, the EU must balance three indicators: economy, security and sustainability.

The European Commission published the European Energy Security Strategy on 28 May 2014. The report contains discrete geopolitical fragments, such us the reduction of dependence on Russia, the EU's energy market integration, storage capacity expansion and the development of protection mechanisms for states with high dependence on one exporter (European Commission, 2014a). Natural gas will account for a big proportion of the total energy mix of the EU for at least the next two decades. Oil prices that fell significantly during the last three months of 2015, to eventually reach a 10-year low cost of WTI crude of $26.55 on January 20 2016, could rise as abruptly as they fell, and we might encounter similar situations in future owing to the fragile political stability of countries in the Middle East that control one of the biggest reserves of oil and gas in the world. Norway is a more politically stable country and Russia could be a stable supplier if the EU and Russia can find a diplomatic way to reduce the ongoing political discord.

Natural gas has a crucial role in the current energy market of the EU, and the demand for it is predicted to increase for at least the next two decades, (Holz, Hirschhausen, & Kemfert, 2006), (Eurogas, 2010) , (Honore, 2014), (European Commission, 2008b), (Van der Hoeven, 2014), (IEA, 2011). According to the International Energy Agency and the Organisation of Economic Co-operation and Development (IEA & OECD, 2011), "*From 2010, global natural gas use increases by more than 50% and accounts for over 25% of world energy demand in 2035*". This continuing global increase in the demand for natural gas combined with an

ongoing decline in natural gas production in the EU are increasing global competition for access to natural gas resources (Remme, Blesl, & Fahl, 2008) (Honore, 2014) (IEA, 2010).

To ensure the energy security of our EU society, it is crucial to understand how the EU can fortify — politically and technically — imports of natural gas against political pressures, shortages and price fluctuations in the global market. The EU needs energy supplies that are physically available, geopolitically accessible, economically affordable and environmentally acceptable (Elkind, 2010). Natural gas meets these conditions because its reserves are ample, it can be easily distributed (either as liquefied natural gas or as compressed natural gas), it is affordable, and it is much more environmentally friendly than other fossil fuels (Riddervold, 2012) (Manfred, 2012) (Cornot-Grandolphe, Olivier, Dickel, Chabrelie, & Rojey, 2003) (IGU, 2014). In my research, I examine whether the natural gas reserves in the Arctic could be an affordable and accessible source of energy for the EU. My study aims to advocate the best strategy for building reliable energy security for the EU with the contribution of natural gas from the Arctic.

In the process of conducting my research, I have scrutinised data produced by think tanks, research organisations (The Arctic Institute, the Stratfor, the Arctic Forum Foundation, the Barents Observer and the Arctic Institute of North America), government agencies, professional associations and commissions. These data helped me to understand the ongoing political situation and identify the major problems in the current EU energy security policy, so that I could develop and suggest solutions. Moreover, I put great emphasis on the cross-checking of information to ensure not only the validity of the data but also the validity of my conclusions.

My interest on human geography and geopolitics led me to commence my undergraduate degree in Geography at Harokopio University in Athens, Greece. After completion of my Master's degree at the University of York, UK, in which I studied Conflict, Governance and Development, I have conducted my PhD on the Barents Region, a complex Arctic region which incorporates several unique actors with different interests. At the Department of Geography in Aberystwyth University, I was encouraged to make use of and combine my interdisciplinary background in geography and political science, fuelling my desire to explore

in depth and in detail the complexity of the Barents Region in relation to energy, environment, population and international relations.

1.3 Aims and objectives

This study brings together the concept of human geography and critical security studies theories of international relations in order to analyse the importance of the Barents Region to the EU, and vice versa, in relation to energy and political relations. In addition, the study considers the adverse effects of climate change and environmental degradation in the Barents Region and the consequences in the Arctic and globally. The overarching aim of this thesis is to understand the inter-related aspects of energy and politics among Norway, Russia and the EU through the lens of critical security studies, while taking into consideration two of the most important elements of the Barents Region in the Arctic – the environment and the local populations. Three main research questions were formulated to achieve this aim.

1. In what ways can critical security studies be applied to the energy security of the EU in relation to Norway and Russia?
2. To what extent do the energy reserves of the Barents Region lead to the production of inter-relations between Norway, Russia and the EU?
3. In what ways can contemporary critical security studies be used to support the development of international policies that can support sustainable development in the Barents Region?

Ultimately, the aim of the thesis is to reveal the energy interrelations among the EU, Norway and Russia with respect to the Barents Region and how these relations affect environmental and human protection. The main objectives of the research are: 1) an extended review of the literature on critical security studies, energy, environmental and human security; 2) to investigate perceptions and attitudes towards energy security through qualitative research; 3) to compare and reflect on the results of the qualitative research; and 4) to identify and propose implications for policy on energy security, environmental protection and human prosperity in the EU and the Barents Region.

1.4 Structure of the thesis

This thesis is organised in ten chapters, including this introductory chapter. In Chapters Two, Three and Four, the literature review is presented and places the thesis in the context of relevant theories of human geography, international relations and academic literature. These chapters illustrate the relations between Norway, Russia and the EU, the relevance of critical security studies in the sector of energy, and two major security aspects of the Barents Region – environmental and human security.

Chapter Five is a historical review of the Barents Region, which helps us to understand in depth the current status of the region in the political agenda. The discussion contributes to our understanding of how the Barents Region became a place of co-operation after World War II, the Cold War and the dissolution of the USSR. Moreover, the chapter outlines the environmental concerns in the region and how the environment is interlinked with the prosperity of the local population.

Chapter Six presents the methodological approach of the study. The chapter begins by discussing the epistemological and ontological underpinnings of the thesis, before providing the rationale for the interpretive qualitative approach taken (semi-structured, open-ended interviews with experts). The methods employed to gather data and their practical application at each stage of data collection are then discussed, and ethical concerns of the research are also considered. The chapter concludes with my approach to data analysis and the procedures undertaken to analyse and represent the research material.

Chapter Seven is the first of the three results chapters. With the title of "Critical Energy Security in The European Union", this chapter is focused on international relations and addresses the first research question, "*In what ways can critical security studies be applied to the energy security of the EU in relation to Norway and Russia?*". To answer this question, the chapter begins by considering the application of critical security studies in the energy sector and continues with discussion of energy securitisation and desecuritisation within the EU. As major energy concerns have been identified between Russia and the EU, the chapter analyses the possibilities of desecuritisation of EU-Russia energy relations.

Chapter Eight, entitled “Interrelationships among Norway, Russia and the European Union in the Barents Region”, addresses the second research question, “*To what extent do the energy reserves of the Barents Region lead to the production of inter-relations between Norway, Russia and the EU?*”. To address this question, the chapter is organised around three main aspects of the Barents Region. i) The role of the Barents Region in the EU’s energy security, ii) The role of the EU in the Barents Region and iii) The emerging geopolitics among the EU, Norway and Russia in relation to the Barents Region. In particular, the chapter provides insights into the Barents Region and how contemporary developments in climate change and extraction technology create political issues among those three actors in the region.

Chapter Nine, “Environmental and Societal Security in the Barents Region”, addresses research question three, “*In what ways can contemporary critical security studies be used to support the development of international policies that can support sustainable development in the Barents Region?*”. This chapter builds upon the fifth and sixth chapters by exploring how two major features of the Barents Region, namely the environment and local populations, could be adequately protected in an age of extended energy exploration. The chapter is organised into two major sections. The first section examines the environmental security aspects of the region and the second focuses on societal security. These issues are interwoven in the region, so need to be examined together to enable the best analysis and to provide the greatest understanding. Finally, in this chapter, I propose and discuss a new field of securitisation – the securitisation of sustainable development.

The Tenth and final chapter, the Conclusion, returns to each of the three empirical chapters and their related research questions and discusses the contribution of the thesis. The limitations of the study and its implications in terms of policy making are then discussed, and the chapter concludes with a discussion of the potential for further research.

Chapter 2

Geopolitical Context of Study

2.1 Introduction

This chapter is the first of the literature review, which sets the scene of my research. It focuses on the relations between the EU, Norway and Russia at a political level concerning the Barents Sea, a part of the Arctic Ocean. It also outlines the energy policies of the EU and how those affect the interests of Norway and Russia in energy exploration and exploitation.

Before the Cold War, the Arctic was a land of indigenous populations and did not attract much international attention. Suddenly, during the Cold War, the Arctic became a field of great importance for the two rival parties, the USA and Russia, in relation to nuclear strategies, both in the air and under water. The Arctic again became a less important region when the Cold War ended. However, in the past two decades, the Arctic has again moved towards the centre of the political agenda for three major reasons: ice melting, technological advances, and the insufficiency of natural resources globally.

The EU needs more and more energy to cover its needs, and fields of fossil fuels under the Barents Sea, which belongs to Norway and Russia, could provide a proportion of this energy demand. Nevertheless, several complications hinder full-scale exploitation of the Barents Sea. Firstly, there are environmental and indigenous concerns, secondly, alternative energy sources are becoming available globally through the shale gas revolution and renewables, and thirdly, the EU is politically suspicious of Russia as an energy provider. In this chapter, I present the geopolitical scene among these three actors and how these impacts on the energy security policies of the EU. An understanding of the geopolitical base will enable me to elaborate further not only on the International Relations theories that I use later, but also on environmental and human aspects of the Barents Region.

Events that could cause tension between states according to traditional security concerns – for example, oil and gas exploration and exploitation, mining, increasing tourism and the

impacts of the expanding globalisation – in the Arctic uniqueness, are bolstering cooperation among Arctic states. The Arctic is not a no-man's land but belongs to the rim states, who have agreed borders and follow international law procedures, especially where fossil fuels and fisheries are located. Many academics and researchers argue that a conflict for Arctic territory between states is very unlikely, and that the only potential for a violent conflict in the Arctic Region could be a spill-over from another conflict elsewhere (Hossain, Zojer, Greaves, Roncero, & Sheehan, 2016). Even so, the Arctic has not yet been affected by the conflicts in Georgia, Crimea and Syria, and cooperation in the region continues. Until now, the only conflicts in the Arctic are among local and central governance rather than among states, and relate to economic interests, such as the petroleum and fishing economies (Morozov, 2009), (Nicol & Heininen, 2013), (Le Mière & Mazo, 2013), (Berkman & Vylegzhanin, 2013), (Tamnes & Offerdal, 2014).

2.2 Barents Sea Natural Gas & Geopolitics between Norway and Russia

The reduction in the area of the Arctic sea ice is enabling easier human access to the Barents Sea. Technological advances that facilitate human activities in the harsh environment of the Arctic are having a similar effect, by improving communications and reducing the costs of exploitation of fossil fuels. Ultimately, owning and exploiting such big volumes of resources, has a positive outcome for business and states. On the same wavelength, governing and regulating these resources grants one with significant (and influential) political power e.g. Russia (Järvenpää & Ries, 2011, pp. 129-130).

There are mixed motivations for the EU to be involved in the Arctic and these include both the natural resources available there and the environmental protection of the region. It is well known that most of the energy consumed in the EU comes from Norway and Russia. In 2012, Norway supplied 31% of natural gas and 11% of crude oil imported into the EU, and Russia supplied 39% of natural gas imports (European Commission, Supplier countries, 2015). Yet, the EU consumes 25% of the natural gas and oil produced in the Arctic (Eurostat, 2015b), (Hossain K. , 2015). Moreover, the Arctic contains about 30% of the world's undiscovered natural gas and 13% of undiscovered oil. The majority of these resources are located at a depth of less than 500 metres. The part of the Arctic that falls into Norway's

and Russia's jurisdiction probably holds 25% of the Arctic's oil and 73% of the natural gas (Gautier, et al., 2009) & (Hong, 2012).In addition, the Arctic is characterised by stability and peace in comparison with the Middle East, and importing energy from the Arctic could significantly enhance the energy security of the EU. Of note, reserves of around 600 MMboe were discovered in the Barents Sea (Carstens, 2012).

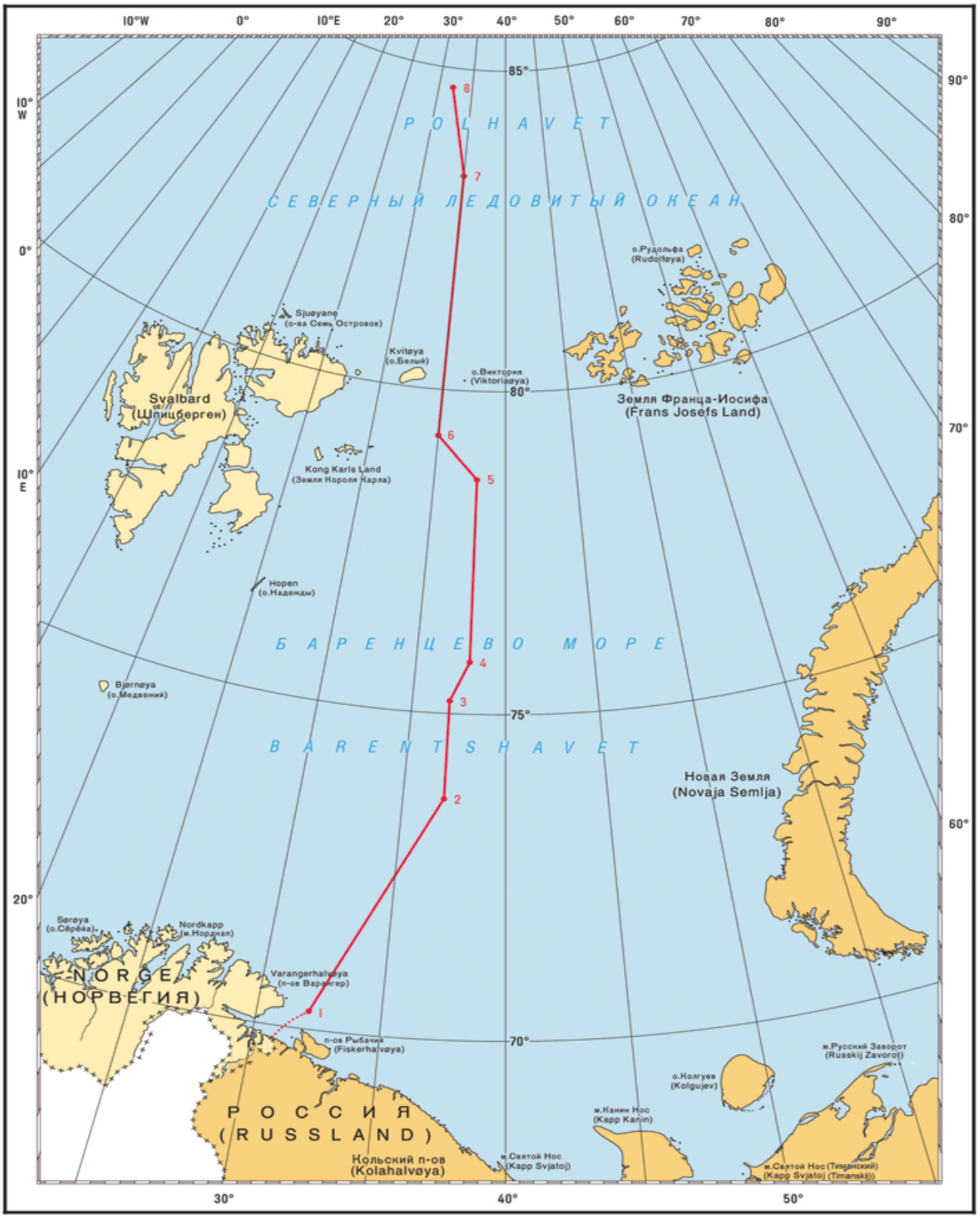
From the 1970s until 2010, Norway and Russia were in dispute about the border from north of the Kola Peninsula and the northern coast of Norway. It was an area of 175.000 km^2 with great fisheries, until the recent discoveries of abundant reserves of oil and natural gas. On 27th April 2010, an important agreement began to form between Russia and Norway. A forty-year maritime border dispute ended with the signing of the treaty in Murmansk on 15th September 2010 by Russian President Dmitry Medvedev and Norwegian Prime Minister Jens Stoltenberg. The treaty entered into force on 7th July 2011. The 175,000 km^2 area was divided into two equal parts between the two countries. (Kremlin, 2010) (Kremlin, 2010) (Norwegian Ministry of Foreign Affairs, 2010) (Harding, 2010) (Norwegian Office of the Prime Minister, 2010) (The Kingdom of Norway and the Russian Federation, 2010), (Rozhnov, 2010). As a result of this agreement, the 23rd licensing round for exploitation announced by Norway in January 2015 includes the southeast area of the Barents Sea (Natural Gas Europe, 2015).

In 2015, Norway and Russia saw their gas sales to the EU increase by 7% and 8%, respectively. Norway exported 108 BCM, with the main buyers being the UK, Germany, Belgium and France (GASSCO, 2016). Russia exported 159.4 BCM to non-CIS countries (Interfax, 2016); the main importers were the UK, Germany, Italy and Poland, (Staalesen A. , 2016) and great increases of Russian gas imports were observed in the UK, Germany, Italy, France and Austria.

Norway expects the EU to increase the proportion of natural gas in its energy mix, as this is the main way for the EU to reduce its emissions and achieve its climate goals (Holter, 2015). In addition, the Societe General has estimated that from 2016 onwards, LNG supplies will grow annually at a rate of 6%. This is facilitated by the five new LNG plants in the US, which

could produce 74.5 BCM of LNG per year, which is almost equal to Europe's needs (Shiryaevskaya, 2015).

Map 2: Maritime Delimitation in the Arctic: The Barents Sea Treaty.



Dotted red line: demarcation of 2007 agreement. Red line: demarcation of the continental shelf and the economic zones of the 2010 treaty (Norwegian Ministry of Foreign Affairs, 2011).

Map 3: The agreed border, the disputed area and the preferred maritime borders of Norway and Russia. Depicted in green, major oil and gas fields.

Source: (BBC, 2010)

2.3 The Political Scene Between the EU and Norway

Norway has captured the attention of the EU by presenting the High North, and especially the Barents Sea, as the new energy reservoir for the EU, as there are great amounts of oil and gas lying under the Norwegian seabed. In addition, Norway also pointed out its stability as an energy supplier and as a region suitable for investment in comparison with an unstable world (Norwegian Ministry of Foreign Affairs, 2005), (Norwegian Ministry of Foreign Affairs, 2006). Kristine Offerdal argued that the main reason for these actions was to prevent Norway being marginalized and left alone to deal with Russia with respect to energy and security issues in the Barents Region. This argument was based on the fact that the Arctic became less relevant to US and NATO security after the Cold War, so that Norway to felt "*more on its own in the region*" (Offerdal, 2010, p. 31).

The EU first mentioned that it needed to help Norway with sustainable development and exploitation of the High North in 2006 (European Commission, 2006). A year later, the European Parliament stressed how crucial it is to maintain good relations with the EU's energy providers, *"particularly Norway, which remains the third largest oil producer in the world and which offers a stable energy supply and also has a proven track record of relations with Russia in the energy sector;"* (European Parliament, 2006, p. 3). It is also argued that the EU should enhance the importance of its energy cooperation with Norway, as Norway is its second most important supplier of gas (EC & the High Represenative of the EU Council, 2006, p. 4), (European Commission, 2007). In 2008, European Commission President José-Manuel Barroso stated that EU is very keen on Norway's High North policy and the two parties should cooperate more on the exploitation and transportation of resources (Barroso J. D., 2008).

Despite all this interest, the Barents Sea and the Norwegian High North has never reached the higher levels of the EU policy process. It seems that the EU does not care from which part of Norway the imports came, but instead cares whether Norway can provide sufficient amounts of energy to cover the demand of the EU (Offerdal, 2010). Nevertheless, the EU often takes Norway's reserves for granted, as Piebalgs said, *"Today, the EU plus Norway is*

the world's fourth largest hydrocarbon producer only outstripped by Russia, the United States and Saudi Arabia" (Piebalgs , 2006).

On 28 September 2015, Norway completed the *Polarled,* which is the first gas pipeline connecting newly accessible Arctic fields with Europe. This new project enhances the status of Norway as a reliable gas supplier for Europe and, at the same time, increases the energy security of the EU (Statoil, 2015). Notably, as a result of falling oil prices at the same time as the gas pipeline was opened, the worth of gas exports from Norway surpassed those of oil in 2015 (Pettersen, 2015).

Norway has pointed out the lack of an EU policy on a communal natural gas strategy and that lack of policy could result in reluctance and even withdrawal of investments in new exploitation fields and pipeline projects. It is important to remember that the two main suppliers of natural gas to the EU are Norway and Russia, with Russia being the biggest and Norway the second biggest covering about the 20% of the gas consumption in the EU. Norway argues that there are still great reserves in the Norwegian and the Barents seas and that only one third of the existing gas has been extracted to date, ensuring ample and steady production until at least 2030. Finally, Norway endorsed the expansion of the LNG network across the EU, which secures the delivery of supplies, but did not agree to the prospect of joint EU purchases of gas, as they could "*reduce competition and ran contrary to the liberalization of energy markets over the last decade*". Instead, Norway proposes diversification of suppliers and a strong entry to liquid markets in order to achieve better price deals (Adomaitis, 2015).

2.4 The Political Scene Between the EU and Russia

At the beginning of the millennium, the European Commission (EC) estimated that by 2030 imports of gas into the EU will be nearly 70% of the total consumption of natural gas in member states and that the imports of oil will be nearly 90% of the total oil consumption (European Commission, 2000). These numbers were revised in 2007, with gas to reach 84% and oil to reach 93% of the imported amounts respectively (European Commission, 2007). It

is clear under this light why energy security has grown so fast in the political agenda of the EU and that it now holds a position in the foreign policy agenda as well.

The crisis in the Ukraine has negatively affected relations between the EU and Russia, and the EU introduced the first sanctions on Russia in March 2014. These sanctions were mainly travel restrictions and asset freezing to individuals involved in the annexation of Crimea (European Union Newsroom, 2016). Subsequently, targeted measures were implemented, including sanctions on entry to capital markets, the defence and arms trading, dual-use items (goods, software and technology that can be used in civilian and military assets) and sensitive technologies (along with energy sector technologies) (EEAS, 2015). The first set of sanctions was fully implemented on 31 July 2014, with a duration of one year. On 22 June 2015, the measures were expanded until 31 January 2016 and extended again on 21 December 2015 until 31 July 2016 (The European Council, 2015). Russia took counter measures by banning imports of foods from EU and non-EU countries.

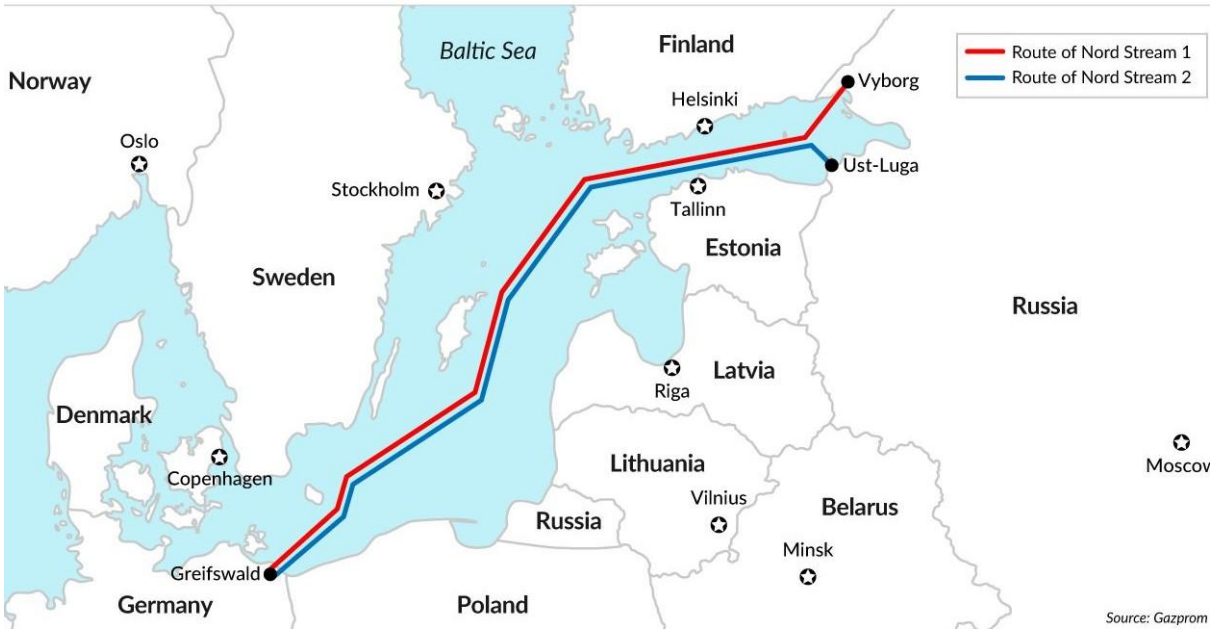
Despite this conflict, the EU and Russia have a mutual energy interdependence based on supply and demand, investments and know-how. Russia, with great reserves of natural gas and oil (20% of the global gas reserves and 5% of the global oil reserves) seeks security and predictability of demand, which contributes greatly to its economy. Conversely, the main goal of the EU is to ensure to its citizens and businesses unhindered and affordable energy (EEAS, 2015). The relations between the EU and Russia in the context of this energy interdependence were mentioned as long ago as 2006, stressing the great significance of the partnership (European Commission, 2006, pp. 4-5).

Operation of the second biggest Russian LNG plant, Yamal LNG, was disrupted due to economic shortages because of EU and US sanctions on Russia. The project consisted of three production lines with an estimated capacity of 7.6 BCM of gas per year (Golubkova & Pinchuk, 2015). Novatek, the leading company of the project, secured funds from Russian and Chinese lenders to help the progress of the project (Golubkova, 2015). Despite record low oil prices and major cancelations of offshore Arctic projects, Russia completed the Novoportovskoye field project in Yamal Peninsula. It is argued that the field could hold up to 250 million tonnes of oil and more than 320 BCM of gas, one of the biggest deposits in the

Yamal Peninsula. In September 2015, Gazprom Neft completed the connection between Novoportovskoye field and an Arctic terminal in Cape Kammeny, giving them the capability to exporting, by tanker ships, two million tonnes of oil in 2016 and up to four million tonnes per year from 2017 (Gazprom Neft, 2013), (Gazprom Neft, 2015a), (Gazprom Neft, 2015b).

Despite the ongoing tensions between Russia and the EU, the NS II pipeline is in progress after the signing of a consortium among the Russian Gazprom, Wintershall Holding GmbH (a BASF subsidiary), PEG Infrastruktur AG (PEGI/E.ON subsidiary), N.V. Nederlandse Gasunie and ENGIE (Nord Stream, 2018). The new pipeline will double the amount of gas that can be delivered from Russia straight to Germany relative to the amount that can be delivered through the existing pipeline, NS I. The NS II project has brought about disagreement about European energy security, with the biggest European energy firms arguing in favour of the second NS project while Brussels, Sweden, the US and most Eastern European countries are opposed to the development. To its supporters, the NS II means cheaper, cleaner and more abundant energy to meet the EU's needs for at least five more decades. To its opponents, it is a geopolitical power play that gives Russia leverage to punish wayward neighbours and to blackmail European powers who may talk tough against Moscow but are becoming more dependent on its gas (Witte & Beck, 2018).

Map 4: Gazprom's Nord Streams Pipelines



(Umbach, 2017)

Jean-Arnold Vinois and Thomas Pellerin-Carlin have argued that the NS II will have negative impacts. Their arguments are fivefold. Firstly, they said we do not need NS II because gas demand is declining in Europe. Secondly, NS II will increase the already abundant and underused import infrastructures in Europe. Thirdly, NS II will not enhance EU energy security, as it does not diversify gas routes but continues to transfer Russian gas. Fourthly, NS II would erode security and the economies of mainly the Ukraine, but also of Slovakia, Romania, Bulgaria and Poland, through the loss of transit fees. Lastly, they argue that NS II divides Europe and that this is the first and foremost goal of Russia (Vinois & Pellerin-Carlin, 2015). Of note, they also said of Norway: *"…100 bcma comes from Norway, and Norwegian gas is the most secure gas you can have since Norway is both an ally and de facto a part of the EU internal market through the European Economic Area Agreement*".

A possible result could be the further downgrading of the EU policies from the Central and East European countries, hindering considerably the upcoming European energy union (Kusznir, 2015). This is because the East European countries are losing their geopolitical importance as transit countries for energy as a result of the NS II pipeline and they are likely to lose significant income from energy transit fees. The Polish MEP Jerzy Buzek argued that Europe is seeking lower energy prices through the diversification of routes and resources of supply. This is the main reason that "*LNG terminals and connections are an integral part of EU energy strategy".* It is worth mentioning that he supported the opinion that NS II does not reinforce alliances, as LNG terminals do (Leifheit, 2015a). This opinion is reasonable, as Poland is an Eastern European country in which the significance of energy transfer is reducing because Germany is increasing its energy security directly from Russia instead of through the EU structure.

Recently, many countries have wanted access to LNG, and LNG terminals have been built in France, Spain, Portugal, Italy, the UK, Belgium, the Netherlands and Greece. This development helps Europe to offset the declining domestic production of natural gas, while it helps to challenge the current pipeline supplies. What is more, because of its low price (US$ 3 per MMBtu), natural gas is starting to replace coal and crude oil in generating power and transportation respectively. However, among EU countries, natural gas is the preferred fuel only in Italy – France, the UK, Germany and Spain still prefer other energy sources, such

as nuclear, coal, lignite and renewables. Guy Broggi, Senior Advisor LNG at TOTAL, believes that the demand for natural gas in Europe will not increase, as the EU market seems to have stalled for the near future (Leifheit, 2015b).

The NS II project triggered a lot of disagreements as many officials in the EU and in the US believe that it gives Russia more power over the EU market and makes it easier for Russia to cut off gas supplies from several Eastern European countries. Before arguing that NS II poses a threat to EU energy security, one must consider the market power and regulatory strength of Europe. This new pipeline brings out the deficiencies of the European gas interconnection network and shows that Europe has to integrate its internal market expeditiously, rather than worry about where natural gas comes from. Any new infrastructure that facilitates gas imports is good news. European states must implement legislation, diminish corruption and intensify their competition on the internal market (Boersma, 2015). The former German Chancellor, Gerhard Schroeder, said in November 2015 that "*Russia plays a central role in the question of how we Europeans can secure our energy supply. Norway and Russia are the most secure and reliable energy partners for Europe*" (Leifheit, 2015c)

Gertjan Lankhorst, president of Eurogas, argued that the new NS II pipeline project does not imply more dependency from Russia. He also noted that the countries that are fully dependent on Russia need only 22BCM of gas out of the 400BCM that Europe needs in total (5%), and that this dependence is also temporary. He said that diversification of sources could be achieved through the expansion of two-way interconnectors among Europe, especially to Eastern Europe. Considering the Energy Union, he stressed that diversification is not "*to have less buyers of gas but to have more suppliers of gas*". Moreover, bringing natural gas directly to Germany will be beneficial for the whole of Europe because in Germany there is a competitive market with competitive prices. Subsequently, with the proper infrastructure in place, natural gas could be shipped all over Europe. Concluding Lankhorst said that "*we need to stick to the primary objective of completing and improving the internal energy market and promote market mechanisms also in a global setting.*" (The Brookings Institution, 2015).

At the European gas conference in Vienna, Rainer Seele (the CEO of Austrian OMV), Elena Burmistrova (the Director General of Gazprom Export) and Viktor Zubkov (Gazprom's Chairman of the Board) argued in favour of NS II. Rainer stated that diversification is not trying to evade Russian gas (25% of the total EU imports), as the European Commission supports. As the NS I enhanced the European energy security, the same context applies to NS II, coping with the declining domestic energy production, mainly in UK and the Netherlands. Additionally, the current main options for the EU for energy imports are Norway, Russia and several countries that can supply LNG. This means that pipelines form the foundation of European gas supply. Elena Burmistrova declared that the project will transfer natural gas straight to the EU reliably, without the economic contribution of European citizens, as the project is fully funded by the stakeholders. Zubkov pointed out that Europe has to clarify its position about natural gas in relation to its future energy mix. Addressing the issue actively and creating coherent energy trade rules will help to attract investments in infrastructure, exploration and production. Summing up, he listed the challenges of energy security as follows: "… c*ontradictory energy politics of the EU, transit risks and problems in developing new gas transportation infrastructure, the decline of EU production, the reduction of investment and exploitation of hydrocarbons and the necessity to do away with subsidies for alternative energy*." (Natural Gas Europe, 2016).

Europe must act fast, in order to establish a network of two-way interconnectors among their states – bypassing their borders – which would serve three basic purposes. First, making the current, long pipelines more efficient; second, bringing to light any flaws in the current infrastructure; and third, making it possible for investors to fund and build these projects.

2.5 The political scene between the EU and the Arctic

The EU is not an official observer in the Arctic Council, but it is engaged in Arctic matters, even in a period in which global awareness has moved to other affairs due to low oil prices, a decrease in Arctic shipments and the ongoing conflict in Ukraine. However, interest in matters like climate change, the environment and regional evolution has not declined. Additionally, the EU is a core actor in promoting collaboration and political stability with

Russia. Last but not least, Europe acts to the benefit of the Arctic, as its sets stringent environmental targets on its environmental Arctic policies (Østhagen & Raspotnik, 2015). In 2016, the EU set three major policy targets concerning the protection of the Arctic environment. The first target was to protect and preserve the Arctic while supporting research to address environmental impacts and climate change. The second target was to promote sustainable use of resources and economic development in collaboration with people living in the region. The third target was to enhance international co-operation through engagement and dialogue with Arctic states, indigenous peoples and other partners (European Commission, 2016).

The European Arctic countries recognise the EU as a useful actor for the region, while on the other hand Russia wants to keep Arctic affairs exclusively among the five rim states (Corell, 2009). There are many EU countries that are represented in the Arctic Council (AC), but the EU still asked to be represented as an institution. The request was rejected in 2009 and in 2011. On the 15th May 2013, in the Ministers' meeting in Kiruna, Sweden, the EU applied for the position of permanent observer but was vetoed by Canada (Quaile, 2013). In 2009, the EU prohibited the import of all goods containing seal products. This caused problems for the economies of indigenous Canadian populations, and is an important subject for Canada, which took over the Arctic Council's presidency after Sweden in 2013. Canada has urged its indigenous peoples to sign a petition in support of the government's veto against the EU if the EU do not lift the prohibition of seal products. According to Steffen Weber, secretary general of the 'EU–Arctic–Forum', which is an independent think tank, the EU is a major player in the Arctic with obvious economic interests. The EU subsidises a significant number of scientific programs in the area and also imports gas, raw materials and fish from the Arctic region (Quaile, 2013).The EU has been temporarily given the right to take part in meetings of the Arctic Council (Reardon, 2013), but the application of the EU to become a permanent observer has been postponed (Nielsen, 2013) & (Representatives of the Arctic Council, 2013).

At the end of Canada's presidency, the ninth Arctic Council meeting took place in the Nunavut capital, Iqaluit, Canada, in April 2015. The Chairmanship passed to the US until 2017. Although Canada lifted the veto imposed on the EU, Russia then banned the EU from

obtaining the formal status of an observer because of its geostrategic interests. Consequently, the status of a permanent observer for the EU seems to have been postponed until 2017 and will remain the same after Kiruna's Arctic Council Ministerial meeting in 2013 (Tournan, 2015). This move by Russia can easily be explained by the already poor relations between the EU and Russia, starting from the Crimea crisis and the sanctions imposed by the EU that hinder Russia's Arctic development. If these sanctions, which obstruct Russia's exploration and drilling and eliminate transfer of western technology to Russia, are not lifted, the EU might not obtain observer status even after 2017 (Haines, 2015), and this applies until today. However, even without the status of an official observer, the EU is a significant actor for the Arctic through its policies and its market power, regardless of an official status in the AC (Hossain K. , 2015, p. 91).

2.6 Energy Security of the EU

Powerful rearrangements could alter the dominant perspectives of current alliances in world politics in unexpected ways during brief periods of geopolitical change. "*Assuming stability in geopolitical arrangements is frequently a mistake*" (Dalby S. , 2007). Even in 2007, it was pointed out that the "*decision-making on energy security in major powers has slipped dangerously from the hands of economic policy-makers to the hands of national security strategists*." (Austin & Bochkarev, 2007, p. 36).

Most European politicians and officials have rejected the securitisation of energy security, and the robust opinion of European diplomats led to rejection of military deployment to guarantee energy security. European states opposed the possible involvement of the European Security and Defence Policy (ESDP) in energy security (Youngs, 2009, p. 42). After destabilisation at the borders between Russia and Georgia in 2006, deployment of EU military units was considered to protect pipelines that transfer goods to the EU. However, these options never gained major support from the Member States. Importantly, almost all EU policy makers argued for an indirectly securitised approach to energy that focuses on the management of energy demand rather than on the security of energy supplies, which is the case in the USA (Youngs, 2009, p. 44).

In 2013, EU production of energy accounted for 5.6% of the global production. China produced 18.1% and the US 14.6%. At the same time, the EU consumed an estimated 11.9% of global energy, China 20.4% and the US 16.2%. Four EU countries import more than the 80% of their total energy consumed (Ireland, Cyprus, Luxembourg and Malta). On the other hand, Denmark, Estonia and Romania import less than 20% of their energy. The EU imported natural gas from several production countries: 39% from Russia, 29.5% from Norway, 12.8% from Algeria, 6.7% from Qatar, 1.8% from Nigeria and Libya and the rest from other, non-specified sources (European Commission, 2015).

Key facts and figures on EU energy security

1. In 2014, the EU imported 53% of the energy it consumed. Energy import dependency relates to crude oil (almost 90%), natural gas (66%) and, to a lesser extent, solid fuels (42%) and nuclear fuel (40%).
2. Energy security of supply concerns every Member State, even if some are more vulnerable than others. This is valid in particular for less integrated and connected regions, such as the Baltic region and Eastern Europe.
3. The most pressing issue in the security of energy supply is the strong dependence on a single external supplier. This is particularly true for gas, but also applies to electricity. Specific examples include:
4. Six Member States depend on Russia as their single external supplier of gas imports, and three of these states use natural gas for more than one quarter of their total energy needs. In 2013, energy supplies from Russia accounted for 39% of EU natural gas imports and 27% of EU gas consumption; Russia exported 71% of its gas to Europe, with the largest volumes to Germany and Italy.
5. For electricity, three Member States (Estonia, Latvia and Lithuania) are dependent on one external provider for the operation and balancing of their electricity network.
6. The EU external energy bill is more than €1 billion per day (around €400 billion in 2013) and more than one fifth of total EU imports. The EU imports more than €300 billion of crude oil and oil products, of which one third comes from Russia.
7. EU energy security has to examined in the context of growing energy demand worldwide, which is expected to increase by 27% by 2030, with important changes to energy supply and trade flows.

(European Commission, 2014, p. 2)

As temporary gas shortages materialised during the winters of 2006 and 2009, mostly in Eastern Europe, the need for a common European energy policy emerged. Since 2009, the EU has tried hard to reinforce its energy security in relation to gas supplies by decreasing the number of Member States that acquire their gas from only one supplier and are fully

dependent on it. Even though the EU has made great progress in this respect, with new infrastructure installed or upgrades made to existing infrastructure and pursuit of a diversification agenda, it is still considerably exposed to external energy stress (European Commission, 2014, p. 2).

Investing in the physical protection of critical infrastructure is a key EU policy with the aim of enhancing the protection of energy infrastructure and therefore its energy security. Reinforcing IT security is also included in the protection of infrastructure. The protection of the strategic energy infrastructure is an important feature, which includes both gas and electricity grids. The argument is that consumers must be protected by better management of non-EU infrastructure owned by state-companies, national banks and sovereign funds from the supplier countries. The ultimate goal is to create an "*overall energy system that balances appropriately centralized and decentralized energy production, with the aim of building a system that is both economically efficient and resilient to outages of individual major assets*" (European Commission, 2014, p. 6).

It has been argued that Russia is capable of causing discord among the EU Member States through its energy policies. EU Member States and their respective energy companies signed bilateral long-term contracts with Gazprom and presented this development as a favourable outcome for energy security. Nevertheless, as Russia has made radical changes to its energy-based power, the bonds between the EU and Russia are tightening. On the other hand, the EU's fixation with Russia has led to insufficient engagement in Northern Africa, which has led to complains from southern EU Member States, as their major security priority is migration rather than energy security (Youngs, 2009, pp. 172-173).

According to the European Commission, gas imports into the EU will remain stable until 2020 at a level of 70% of the gas consumed in the EU. By 2030, gas imports could rise to 350 bcm per year. In 2013, Russia supplied 39% of gas consumed in the EU, Norway 33% and Algeria and Libya combined 22%. LNG imports from the aforementioned countries, Qatar and Nigeria, peaked at 20% in 2014, but then declined to 15%, as higher prices in Asia attracted the shipments. New LNG suppliers from the US, Australia, Qatar and possibly East Africa would boost the size and liquidity of the global LNG market.

Energy security is often difficult to combine with climate policies, not only at the EU level but also among the Member States' national energy policies (IEA, 2014, p. 5). The energy security strategy of the EU aims to obtain more diversified natural gas resources and to maintain significant import volumes from reliable suppliers. All the Norwegian, Mediterranean and North African hydrocarbon fields have the advantage of geographical proximity to the EU and potential growth of production. The EU must ensure that the gas from these suppliers reaches all regional markets unhindered through its internal interconnectors. New energy sources and energy corridors such as Azerbaijan, the Southern Corridor, Turkey, Turkmenistan, Iraq, Iran and the Eastern Mediterranean can benefit the EU only with the relevant infrastructure capabilities, competitive prices and, in some instances, improved diplomatic relations. Strong cooperation among the Member States and the EU is required for a reliable future energy policy (European Commission, 2014, pp. 15-16). Investments of up to €150 million in new energy infrastructure projects are increasing energy security by enabling completion of an integrated EU energy market and increasing the incorporation of renewable energy in the electricity grid. At the same time, projects like these will help to abolish the energy isolation of some EU countries from Europe-wide energy networks (European Commission, 2015).

2.7 Reflections

Initially, this chapter outlined the political scene between Norway and Russia at the Barents Region. The new opportunities that the new border brings to the industry of natural resource exploitation are great. On the other hand, the suspicion of the EU about Russian gas imports affected Norway, as the EU is not going to commit itself to natural gas, as it comes 3rd even 4th in the energy mix of many Member States. This could have adverse consequences for the Norwegian energy sector, as investors are becoming less eager to provide support on new projects.

The political relations between Russia and the EU are much more complicated and adverse than the relations between Norway and the EU. As the Crimea crisis has not been stabilised and there are still violent outbreaks and hard rhetoric between Russia and Crimea, the

relations between Russia and the EU could remain problematic. Nevertheless, huge supplies of natural gas and oil are imported to the EU from Russia. Thankfully, hard military solutions have been avoided during all the energy-related conflicts, as policies advocating diversification of imports and enhancing renewable energy production have been preferred. Along with energy security, the EU is concerned with climate policies, which are contrary to the current levels of energy imports and consumption. As the EU sees itself as a champion against climate change, future energy policies should be driven away from the extensive consumption of fossil fuels, creating new arrangements among the geopolitics of energy. Nevertheless, the road to energy transition will not be an easy one. The next literature review chapter presents the critical security aspects of energy and why they are relevant for my analysis.

Chapter 3

Critical Security Studies and their Energy Perspective in European Union

3.1 Introduction

In this chapter, I will use the Copenhagen School of thought to examine the securitisation of energy among the EU (EU), Norway and Russia. As the number of studies in this field is expanding, I will also examine the securitisation of critical infrastructure, such as pipelines LNG carriers and LNG terminals. Furthermore, I will examine the Welsh School of international relations and emancipation theory in relation to European energy and the indigenous Arctic populations. My aim is to contribute to a better understanding of Arctic (in)securities through a combination of the Copenhagen and Welsh Schools of thought of international relations. Thus, the purpose of using these two schools of thought in my research is not to criticise and scrutinise their weak points, but to identify the wider and deeper insecurities that lie below the thin Arctic ice.

3.2 Copenhagen School of Thought & Securitisation theory

The cradle of Copenhagen School[1] of thought and securitisation theory was developed by Barry Buzan (Buzan, Morten, Lemaitre, Elzbieta, & Wæver, 1990) (Buzan B. , 1991) (Buzan B. , 1997) (Wæver, Buzan, Kelstrup, & Lemaitre, 1993) and was fully developed as an approach to international relations in the second half of 1990s; the main contributors were Ole Wæver and Barry Buzan. The concept of securitisation – and desecuritisation – was developed by Ole Wæver in the document "*Security, the Speech Act. Analysing the Politics of a Word*", in which he characteristically argues that "*This… …approach… … must, therefore, try to develop the possible modalities for a de-securitization of European politics."* (Wæver O. , 1989). Later, in 1995, he further analysed his ideas about securitisation and desecuritisation, arguing that "*…a major focus of 'security studies' should be the processes of*

[1] "*The name 'Copenhagen School' was coined by Bill McSweeney (1996) to refer to the group of people who have been writing with Buzan and Wæver since 1988 under the auspices of the Copenhagen Peace Research Institute (CORPI)*" (Buzan B. , 1997).

securitisation and desecuritisation". He also applies his argument to four different paradigms. a) European security from the 1960s to the 1990s, b) environmental security, c) societal security, and d) "Security" in Europe or "European security" (Wæver O. , 1995).

In the book "*Security. A new framework for analysis*" (Buzan, Wæver, & de Wilde, 1998), the founders of the Copenhagen School argue "*…against the view that the core of security studies is war and force and that other issues are relevant only if they relate to war and force*. *… Instead, we want to construct a more radical view of security studies by exploring threats to referent objects, and the securitization of those threats, that are non-military as well as military."* (Buzan, Wæver, & de Wilde, 1998, p. 4). Additionally, they argued that the aim of securitisation studies is to precisely understand "*who securitizes, on what issues (threats), for whom (referent objects), why, with what results and, not least, under what conditions (what explains when securitization is successful).*" (Buzan, Wæver, & de Wilde, 1998, p. 32). Securitisation happens "*If by means of an argument about the priority and urgency of an existential threat the securitizing actor has managed to break free of procedures or rules he or she would otherwise be bound by*" (Buzan, Wæver, & de Wilde, 1998, p. 25). Crucially, the Copenhagen School was "*not arguing that the environment (or any of the other sectors) should be securitized; we merely observe that at least some actors are attempting to do so*" (Buzan, Wæver, & de Wilde, 1998, p. 71).

While Buzan and the rest of the authors of the book '*Security. A new framework for analysis*' advocate broadening of the security agenda, it became apparent that there was a need for robust foundations that could be used to define a security issue because by securing everything, you secure nothing. For example, an issue could be included in the security agenda if it poses a threat to the existence of a referent object (Buzan, Wæver, & de Wilde, 1998, pp. 36-42). So, an existential threat to a referent object is a security issue equivalent. However, declaration of an issue as an existential threat is not itself securitisation, only a securitisation move. If, and only if, the audience accepts the issue as an existential threat and emergency measures are implemented, is securitisation in effect. In this context, it is the securitising actor who has to convince the audience that the specific referent object is existentially threatened (Buzan, Wæver, & de Wilde, 1998, p. 25). When an issue becomes securitised, it is dealt with using tactics that are similar to those used to deal with a military

threat in terms of urgency and justification of irregular political proceedings (Peoples & Vaughan-Williams, 2010, pp. 76-77). Ole Wæver developed the theory of how securitisation occurs, known as 'Speech act Theory':

> "What then *is* security? With the help of language theory, we can regard 'security' as a *speech act.* In this usage, security is not of interest as a sign that refers to something more real; the utterance *itself* is the act. By saying it (security) something is done (as in betting, giving a promise, naming a ship). By uttering 'security', a state-representative moves a particular development into a specific area, and thereby claims a special right to use whatever means are necessary to block it" (Wæver O. , 1995, p. 55).

Subsequently, Buzan and Wæver argued that securitisation is a successful speech act "*through which an intersubjective understanding is constructed within a political community to treat something as an existential threat to a valued referent object, and to enable a call for urgent and exceptional measures to deal with the threat*" (Buzan & Wæver, 2003, p. 491). Put simply, securitisation is an instrument to support our analysis of political practice (Buzan, Wæver, & de Wilde, 1998) (Vuori A. J., 2008). It is a social and intersubjective procedure and occurs when a considerable proportion of the public accept the approach of dividing 'us' from the 'others' (Williams M. C., 2003, pp. 519-520).

As Ole Wæver argued, the securitisation theory – or the Copenhagen School – "*points to the inherently political nature of any designation of security issues and thus it puts an ethical question at the feet of analysts, decision-makers and political activists alike: why do you call this a security issue? What are the implications of doing this – or not doing it?*" (Wæver O. , 1999). The fear of an armed conflict, for most developed states, has diminished as security communities (for example, the EU, ASEAN and NATO) arose after the end of the Cold War. Without the obscuring mist of military threats, other significant risks, such as debt, inflation, poverty and trade conflicts, became more important (Buzan B. , 1991, p. 369).

According to Buzan et al., the concept of security is inherently connected to the survival of a specific referent object (Buzan, Wæver, & de Wilde, 1998, p. 36). The analysis of

securitisation focuses on the environmental, economic, societal and political sectors, but not on the energy sector; therefore, there is a gap in the literature between the emerging sector of energy security and securitisation theory. As Christou and Adamides argue, only a few works have tried to define energy security through the Copenhagen School (Adamides & Christou, 2015). As a result, it remains unclear whether energy security will become the sixth security sector or will remain a referent object under the economic sector. (Christou & Adamides, 2013, p. 509).

The Copenhagen School of Thought has received considerable criticism, especially from Stephen Martin Waltz in his article "*The Renaissance of Security Studies*" (Walt, 1991), in which he argues that the inclusion of non-military actors, such as pandemics and natural disasters that threaten not only states but also societies and individuals in the study of security will "*destroy its intellectual coherence*. In his article "*Identity and security: Buzan and the Copenhagen school*", Bill McSweeney, who is considered to be the leading critic of the Copenhagen School, (Smith S. , 2000, p. 85) argues that in the Copenhagen School of thought, "*Society is conceived as a social fact, with the same objectivity and ontological status as the state*", "*…the misunderstanding of 'identity' follows from the definition of society. Who we are is not a matter of fact imposed on individuals who 'belong' to the 'society' of Wæver et al. Their idea of collective identity as a social fact projects the image of a collective self to be discovered: we are who we are*", and "*We cannot assume, by definition, that 'society' embodies a single value or interest – identity – which stands alongside the values of the state as the only object of vulnerability and threat which is relevant to security analysis. The problem is, rather, to investigate which interests are at stake and who are the interested parties pursuing them*" (McSweeney B. , 1996, pp. 90-91). In his article "*The Concept of Security*", David Baldwin argues that "*the concept of security* (is) *insufficiently explicated* (rather) *than essentially contested*", "*since security competes with other goals for scarce resources, it must be distinguishable from, yet comparable with, such goals. This requires that the relative importance of security be left open rather than built into the concept*", and "*The new literature on security has contributed very little to an understanding of the concept. The multidimensionality of security and the expansion of referents outside the nation-state are not innovations. To the extent, the new thinking about security focuses on conceptual issues not much is new*" (Baldwin, 1997).

Another critique came from Johan Eriksson in his article "*Observers or Advocates? On the Political Role of Security Analysts*" as he argues that "*The group fails to discuss the political consequences of taking a multisectoral view of security. Why exactly a military, environmental, economic, societal and political sector? To what sectors does the securitization of aids or information technology belong? Does the securitization of new issues require the construction of new sectors?*". What is more, he pointed out that "*The Copenhagen School is more reluctant to securitize the environment than identity*" (Eriksson J. , 1999, p. 317).

Buzan and Wæver have replied to many of their critics. For example, their article "*Slippery? Contradictory? Sociologically Untenable? The Copenhagen School Replies*" (Buzan & Wæver, 1997) is a correspondence to McSweeney's article, arguing that:

> "*Our approach has the basic merit of conceptualizing security as a labelling for which actors can be held responsible rather than an objective feature of threats. Thus, although the multisectoralism of the approach enables a proliferation of securitization, its constructivism delivers the means for questioning and politicizing each specific instance*" (Buzan B. , 1997, pp. 24-25) (Buzan, Wæver, & de Wilde, 1998, p. 212).

In addition to this debate, Olav F. Knudsen argued that the deliberation was focused more on philosophical concepts rather on essential context. Consequently, he advocates for refocusing in the essential context of security policies whose role is to shape the constitutional relations among societies, groups and states. He is also concerned that the Copenhagen School has attached little importance to "(1) *keeping security research trained on the study of large-scale conflict and its potential for turning to violence,* (2) *to preserve an objective core in the concept of threat and* (3) *to focus on the state as a collective actor whose roles in security terms include inter alia, the processing of threats"* (Knudsen, 2001, p. 356). Furthermore, Holger Stritzel has argued that the Copenhagen School of Thought is lacking "*a better and more comprehensive awareness of the existence of a social sphere"* (Stritzel, 2007, p. 365). On the contrary, Wæver defended Securitisation Theory by arguing

that *"Securitisation is ultimately constituted in the inter-subjective realm and therefore even very important conditions for successful securitisation can never replace the political act as such*" (Wæver O. , 2000, p. 252) The reason is that "*causes always have to pass a number of decisions of a political nature and the status of 'security' is therefore as socially and politically constructed"* (Wæver O. , 2000, p. 286).

3.3 Welsh School of Thought and Emancipation

The Welsh – or Aberystwyth – School of Thought of international politics, also known as Critical Security Studies (CSS), has its foundations in Karl Marx's philosophy. German thinkers such as Max Horkheimer, Theodor Adorno, Herbert Marcuse and, recently, Jürgen Habermas further analysed the ideas of emancipation and formed the Frankfurt School during the period between the World Wars. The fundamental ideas of Critical Theory have been epitomized comprehensively by Raymond Geuss as such:

i. *Critical theories have special standing guides for human action in that: (a) they are aimed at producing enlightenment in the agents who hold them, i.e., at enabling those agents to determine what their true interests are; (b) they are inherently emancipatory, i.e., they free agents from a kind of coercion which is at least partly self-imposed, from self-frustration of conscious human action.*
ii. *Critical theories have cognitive content, i.e., they are forms of knowledge.*
iii. *Critical theories differ epistemologically in essential ways from the natural sciences. Theories in natural science are 'objectifying'; critical theories are 'reflective'*. (Geuss, 1981, pp. 1-2)

The Welsh School of critical security uses the main ideas of Critical Theory, especially those developed after the Cold War, arguing that theories of Realism in international relations can no longer adequately explain the complexity of world politics, as they are very state-centric. The main contributors to CSS were Ken Booth, Richard Wyn Jones, Keith Krause and Michael Williams. The aim of CSS was to open up security studies to more extensive theoretical analysis, and to broaden the security agenda to engage with issues beyond state and

military power (Krause & Williams, 1996) & (Krause & Williams, 1997). While more Frankfurt School oriented, Ken Booth and Richard Wyn Jones argued for less statism, reduced military oriented and zero-sum perception of security and that the ultimate goal for security must be human emancipation (Booth K., 1991) (Booth K. , Security, 2005c) (Wyn Jones, 1999) (Wyn Jones, 2001) (Sheehan, 2005). The real security is not the security of the state per se. Major insecurities are inherently joined with human right abuses, oppression of minorities, poverty and violence against women (Booth K., 2004, p. 7). Even from 1991, Ken Booth argued for an emerging world community without borders and that is less state-centric (Booth K., 1991, pp. 314-315). In relation to security, the declining role of the state is conceived as a positive development because the state is often the main source of insecurity, and Wyn Jones argued that:

> "*In very many cases and not only in the disadvantaged South, the arms purchased and the powers accrued by governments under the guise of protecting their citizens from interstate war are far more potent threats to the security of those citizens than any putative foreign enemy. Eschewing the statism of mainstream security discourse, proponents of Critical Security Studies recognize that, globally, the sovereign state is one of the main causes of insecurity: it is part of the problem rather than the solution.*" (Wyn Jones, 1995, p. 319).

The Welsh School cannot tolerate the idea of insecurity remaining in the system, as realists believe that one state's security is another state's insecurity. As Booth said, "*true security can only be achieved by people and groups if they do not deprive others of it*" (Booth K., 1991, p. 319) (Booth K., 1991, p. 539). Ultimately, the Welsh School of Thought connects firmly with the Critical Theory of the Frankfurt School through the admission that security must be understood as emancipation.

> "*Emancipation is the freeing of people (as individuals and groups) from those physical and human constraints which stop them carrying out what they would freely choose to do. War and the threat of war is one of those constraints, together with poverty, poor education, political oppression and so on. Security and emancipation are two sides of the same coin. Emancipation, not power or*

order, produces true security. Emancipation, theoretically, is security." (Booth K., p. 319).

Later, Booth argued that "*Security in world politics is an instrumental value that enables people(s) some opportunity to choose how to live. It is a means by which individuals and collectives can invent and reinvent different ideas about being human.*" (Booth K., 2005c, p. 23).

Even though reconceptualising security through the theory of emancipation adds prominent literature to security theory, there is a major drawback. Both Booth and Wyn Jones do not define where security stops. And if we define everything as a security issue then we secure nothing. It is obvious that this theory lacks the limitations of the Copenhagen School "*of who can and who cannot securitise*" (Floyd R., 2007b, p. 333).

The Aberystwyth School made clear that the security of the state is not inherently linked with the security of the individual. Security is a normative concept and only when security is reconceptualised as emancipation are people free from "*physical and human constrains*" (Booth K., 1991, p. 319) and human security has been implemented. On the contrary, the Copenhagen School emphasised how a discursive process of security abolishes the normal political model. Securitisation theory is not an "*emancipatory ideal*" (Buzan, Wæver, & de Wilde, 1998, p. 35). There are no normative connotations in the analysis of security, and securitisation theory focuses on what security should do rather than what it actually does.

When analysing and scrutinising the Aberystwyth School of thought and the Copenhagen School of thought, it could be argued that there is complementarity between them. As Rita Floyd argued, combining these theories could be beneficial for three main reasons; (1*) "…the more unified the critical schools of security are, the stronger an alternative they can offer to the mainstream of security studies*." (2) "*…the more united the academy the more adaptable are its ideas for policymakers (EU or otherwise)*", (3) "*…a combination of the two schools into a larger approach paves the way for a more critical engagement with security on part of the security analyst, allowing for normative – but denying infinite – conceptualisations of security*" (Floyd R., 2007b, p. 336). While she argues that "*both camps*

having something important and valid to contribute to the study of security as both camps can potentially be right", she concludes that "*security, in general, is neither as good nor as bad as the two camps argue, but rather it is a mixed bag*" (Floyd R., 2007b, p. 337).

3.4. Energy policies of the EU under the scope of securitisation theory

The security agenda has broadened beyond the military sector to include environment, economy, society and politics. Consequently, securitisation theory has been applied to a broad variety of security matters, such as environment (Wishnick, 2010), immigration and society (Alexseev, 2011) (Bigo D. , 2002) (EIA, 2014) (Bigo D., 2005), human security (Floyd R., 2007a), gender approaches (Hansen, 2000) and terrorism (Buzan B., 2006). Problems of energy availability, accessibility, affordability and acceptability create an existential threat to our contemporary human societies and way of living, which generates the need for energy security. In addition, energy insecurity threatens industry, technology, development and science.

In relation to energy, the EU, Norway and Russia could be considered a security complex, meaning that they are actors "*whose major security perceptions and concerns are so interlinked that their national*[2] *security problems cannot reasonably be analysed or resolved apart from one another*" (Buzan, Wæver, & de Wilde, 1998, p. 12). As Vuori argued in 2008, "*it is useful to investigate security speech in as many contexts as possible*" (Vuori A. J., 2008, p. 68). Part of my project is to examine how energy securitisation in Europe has been affected by security discourse among governmental or/and intergovernmental officials.

Securitisation theory has been developed substantially since its conception. The role of the audience and the significance of the theory's intersubjectivity have been stressed and the theory is moving towards "*an investigation of practices*" (Balzacq, Léonard, & Ruzicka, 2015, p. 17). During the past 10 years in particular, the empirical studies of securitisation have

[2] Although the European Union is not a nation state, its main energy strategy is focused on building interconnectors among its member states, increasing their energy resilience and acting as one, stronger, body.

expanded to the areas of migration, environment and health, and the field of energy has grown fast since 2008 owing to tensions between Ukraine and Russia and to energy delivery disruption in Europe (Balzacq, Léonard, & Ruzicka, pp. 17-18). In my research, the 'audience', which holds great importance in securitisation theory, is the citizens of the EU and the populations of the Barents Region.

It has been argued that the 'audience' could be re-conceptualised and divided into categories, such as the *popular*, the *elite*, the *technocratic* and the *scientific* 'audiences' (Salter, 2008). Each group or combination of groups has different enabling securitising power; that is, some groups have more authority to carry out securitisation than others (Balzacq T. , 2011a, pp. 8-9). For example, as Wæver argues, "*Power holders can always try to use the instrument of securitization of an issue to gain control over it. By definition, something is a security problem when the elites declare it to be so"* (Wæver O., 1995, p. 54). Balzacq also added that the 'context' in the securitisation process has a crucial role in enabling – or not enabling – the actors who attempt a securitisation move. Put simply, the 'context' can "*empower or disempower securitizing actors*" (Balzacq T., 2011b). In order to recognise successful securitisation, Salter introduced a method to measure the failure or success of a securitising move, "*by ranking the degree to which policies, legislation, and opinion accords with the prescriptions of the speech act*" (Salter, 2008, p. 325).

Securitisation theory has been criticised for its state-centric approach by both Booth and Wilkinson. Specifically, Wilkinson argues that securitisation theory is very Western-centric and abolishes any local interpretations, understanding and knowledge (Wilkinson, 2011, pp. 95-96), as Booth had already argued before (Booth K., 2007, pp. 165-166). Moreover, Booth includes "Securitization Studies" among other critical security studies[3] that are incapable of addressing what happens to "*Real people in real places*" (Booth K., 2005b, pp. 269-276).

Having mentioned these criticisms, it should be noted that the present study concerns Western states and organisations and the main purpose is to explain Western politics, so there is no contradiction with securitisation theory. Moreover, the security of the 'states' in

[3] Postmodernism/Post-structuralism, Feminism and Constructivism

the EU are inherently connected with the security of the individuals, as these states are not under undemocratic or authoritarian regimes. What is more, the EU is a transnational and intergovernmental institution that promotes multilevel security to its member states. In this study, the state – as a modern, penetrated state – is not perceived as outdated or abolished 'referent object' of international relations theory. The state, and especially the states that are examined, are, as Knudsen has pointed out, "*the major collective unit*(s) *processing notions of threat*[4]" and "*the mantle*(s) *that cloak the exercise of elite power*". They also account for "*the organizational expression that gives shape to communal 'identity' and 'culture'*. Furthermore, states hold "*the chief agglomeration of competence to deal with issue areas crossing jurisdictional boundaries*" while they are "*the manager*(s) *of territory/geographical space – including functioning as 'receptacle' for income; and the legitimizer of authorized action*[5] *and possession*[6]" (Knudsen, 2001, p. 363). The EU is the major security actor in this study, and it deals with the energy concerns of its member states.

Concerning securitisation moves in the energy sector in Europe, I will examine whether a policy change or new infrastructure could be a sign of securitisation (Jackson, 2006, p. 313). In order to clearly present the ongoing energy security policies in the EU, I will use as practical examples the current political discourse on energy imports from Russia and Norway, and more precisely on pipelines from Russia and Norway.

Despite the fact that energy security is a growing concern at the supranational, national and regional level, it is still a perplexing term that incorporates a wide variety of economic, legal, political, military, technical and foreign policy determinants (Riley, 2007) & (Kirchner & Berk, 2010). In line with this idea, it has been argued that "… *energy is a particularly elusive policy domain since it can theoretically be framed in almost all the sectors identified in securitization studies, political, economic and environmental*" (Natorski & Herranz-Surralles, 2008, p. 71).

[4] Italics on prototype
[5] Italics on prototype
[6] Italics on prototype

A commonly accepted, practical and simple definition of energy security is "*the adequacy of energy supply at a reasonable price*" (Haghighi, 2007, p. 15). This definition, along with environmental concerns, has been adopted by the EU (Commission of the European Communities, 2000). Energy security has been defined in detail by Kirchner and Berg as "*the availability of energy in various forms, in sufficient quantity and at affordable prices, delivered in an environmentally friendly, sustainable manner which is also free from serious risk of major disruption of service*" (Kirchner & Berk, 2010, p. 864).

The growing competence of the EC in energy affairs has been the result of outlining energy dependence as a problem in the EU's social sphere. Concerning energy policies, the EC has enhanced its role in environmental protection, competition and the internal market to "*create as many different policy frames as possible to make energy legislation viable*" (Pointvogl, 2009, p. 5708) & (Tosun & Solorio, 2011, p. 3). Moreover, its role in the external energy policy dimension is increasing (Maltby, 2013, p. 441).

The energy crises of 2006 and 2009 made clear to the EC the need to pursue a solution that had already been initiated to promote more internal market integration and diversification of energy supplies. The main arguments in the policies of the following EC engaged with tackling energy insecurity by reducing its import dependency, diversifying its supplies with more LNG terminals and new pipelines, and scrutinising the risks of energy supply in order to address them efficiently (European Commission, 2009).

A common EU energy policy is not likely to be agreed upon in the near future for three major reasons. Firstly, among the member states, there is great asymmetry in relation to the structural energy sector framework (for example, national preferences over energy mixes) owing to their diverse use of energy sources. As a result, engagement of the EU in that area of decision-making is challenging. Secondly, most central and eastern European member states support a common policy owing to their fear of Russia, whereas most western European members would like unity because of domestic production of fossil fuels has been exhausted (for example, the Netherlands and the UK). By contrast, states such as Germany, France and Italy would not like to yield their sovereignty to the EU, as their

market size protects them from threats posed by dependency. Thirdly, even though the gas and electricity markets have deregulated, problems remain because of a lack of interconnectivity among member states. The delay of the completion of a common EU energy policy, hinders the single EU electricity market and of course the gas market. (Commission of the European Communities, 2007) & (Kirchner & Berk, 2010, pp. 867-868).

For Russia, energy security is the pursuit of new markets for their energy exports to increase revenues for the government. Therefore, in energy relations, Russia is looking for the security of demand. As Feklyunina argued, for Russia, "*EU diversification projects are considered to be politically motivated, anti-Russian and not based on purely economic matters*" (Feklyunina, 2008, p. 139). The very beginning of the EU – Russia problem is probably that "*the actions of one* [the EU], *in trying to increase its security, causes a reaction in the second* [Russia], *which in the end, decreases the security of the first… …creating a spiral of insecurities*" (Collins A., 2007, pp. 174-175).

Since its establishment in 1993, the EU enhanced peace and stability on the European continent, bringing old rivals under the same umbrella of cooperation. Wæver gives a very good explanation of the status of Europe. As he points out, "*… the EU is more than an international organization and less than a state. Europe is marked by overlapping and unsettled authorities. The non-members are in an asymmetrical relationship, and they accept it because the EU hold legitimacy as representing Europe… …Europe is more than the sum of the state-parts and the EU can act on behalf of 'Europe'. Europe does not consist of either the EU with components or Member States with an added international organization. The mechanisms that pre-empt most of the main security problems derive from this order, and therefore it is a security system on a par with the classical ones.*" (Wæver O. , 2000, p. 257)

Wæver argued in 2000 that "*security and integration are closely linked: the most important security institution in Europe is the EU, and integration is becoming dependent on security-derived arguments*" (Wæver O. , 2000, p. 260). The ability of the EU to desecuritise aspects is a core component of its magnetism. But this "*demands a well-balanced EU policy of appearing open enough to attract, to keep the East Europeans on the magnet, and not*

enlarge so fast that the EU stops being the EU and the magnet thereby stops being magnetic" (Wæver O. , 2000, p. 262). Even though Wæver stated this in 2000, in 2004 the EU enlarged by 10 countries, more than 65% of its then-current members. What is more, while it took almost 45 years for 15 members to form the EU from 1958 to 2003, enlargement by 13 more member states took place in just 9 years, from 2004 to 2013 (European Parliament & European Commission, 2016). So, did the EU stop being magnetic because of its fast and big enlargements, as Wæver had argued in 2000?

Even today, the enlargement of the EU between 2004 and 2007 is criticised for the lack of preparation and rushed procedures. The majority of the member states that joined during this period are still facing complicated problems. Modern democracies, functional markets and effective administrations had to be built from the very beginning in these states without the essential know-how. In most of these countries, the change is still not complete and their economies are frail and below the average level in the EU. The jurisdictional system lacks strength, the political culture is also very weak, and corruption is predominant or even rising (LSE, 2013).

From a democratic perspective, de-securitisation is probably the optimal way of approaching security analysis, as it keeps the issue in the world of politics. But securitisation is a tempting method of analysis for someone who is worried about an ongoing escalation of security issues. Moreover, securitisation studies are inherently connected to the anticipation and prevention of securitisation rather than problems that are already under the security agenda (Wæver O., 2000, pp. 251-254). Given that securitisation is by definition intersubjective, it cannot simply be decided by one actor whether something is under the security umbrella or not; on the contrary, securitisation causes "*have to pass a number of decisions of a political nature and the status of 'security' is therefore as socially and politically constructed*" (Wæver O. , 2000, p. 286).

The Copenhagen school has argued that securitisation can be applied to a greater degree at middle levels rather than at individual (human being) or system (world) levels (Buzan, Wæver, & de Wilde, 1998, pp. 36-37) & (Buzan & Wæver, 2009). In 2009, Buzan and Wæver further scrutinised the concept of macrosecuritisation in which the "*referent objects are*

higher than those at the middle level and which aim to incorporate and coordinate multiple lower level securitisations" (Buzan & Wæver, 2009).

Macrosecuritisations follow the same rules as a securitisation move: the identification of an existential threat and the referent object followed by the call for exceptional measures (Wæver O., 1995)& (Buzan, Wæver, & de Wilde, 1998). The main differences between macrosecuritistions and securitisations are the larger scale of collectivities (eg. primary institutions of international society or political ideologies) while they attempt to lift securitisations into a larger order. Macrosecuritisations are more complicated than securitisations, as they incorporate higher and lower level securitisations that are vulnerable to break down. A desecuritisation in the system of a macrosecuritisation could break down the whole structure (Buzan & Wæver, 2009). Additionally, Buzan and Wæver developed a comprehensive system to depict macrosecuritisations based on a three-dimension system. The x-axis depicts the comprehensiveness from niche to inclusive, the y-axis depicts the level of analysis from individual to global, and the z-axis is the success, measured as the convinced proportion of the audience.

In this way, they depicted past and current macrosecuritisations, such as the war on drugs, global warming, the global war on terror, the anti-nuclear movement during the Cold War and National Security (Figure 1). For example, the war on drugs was a niche securitisation, which means that it did not structure securitisations in other fields of security. It was situated between Civilizational and Unit levels and had good support from the audience. The anti-nuclear movement was a global issue and a very comprehensive one, but it did not convince a big proportion of the relevant audience that it was of great concern, so it is depicted with very pale blue. Global warming is very high on the y-axis as a global issue, the level of comprehensiveness is partial and depends on other issues that are examined in tandem with climate change, such as energy issues (tensions between Russia and the EU, newly accessible resources on the Arctic), environmental issues (sinking islands in the Pacific Ocean, rising sea levels), global development etc. (Buzan & Wæver, 2009, p. 258). As a result, Buzan and Wæver created the figure below in order to clearly depict the status of old and modern macrosecuritisations.

Figure 1: The three dimensions of macrosecuritisation: comprehensiveness, level and degree of support. The darker the colour, the greater the degree of support.

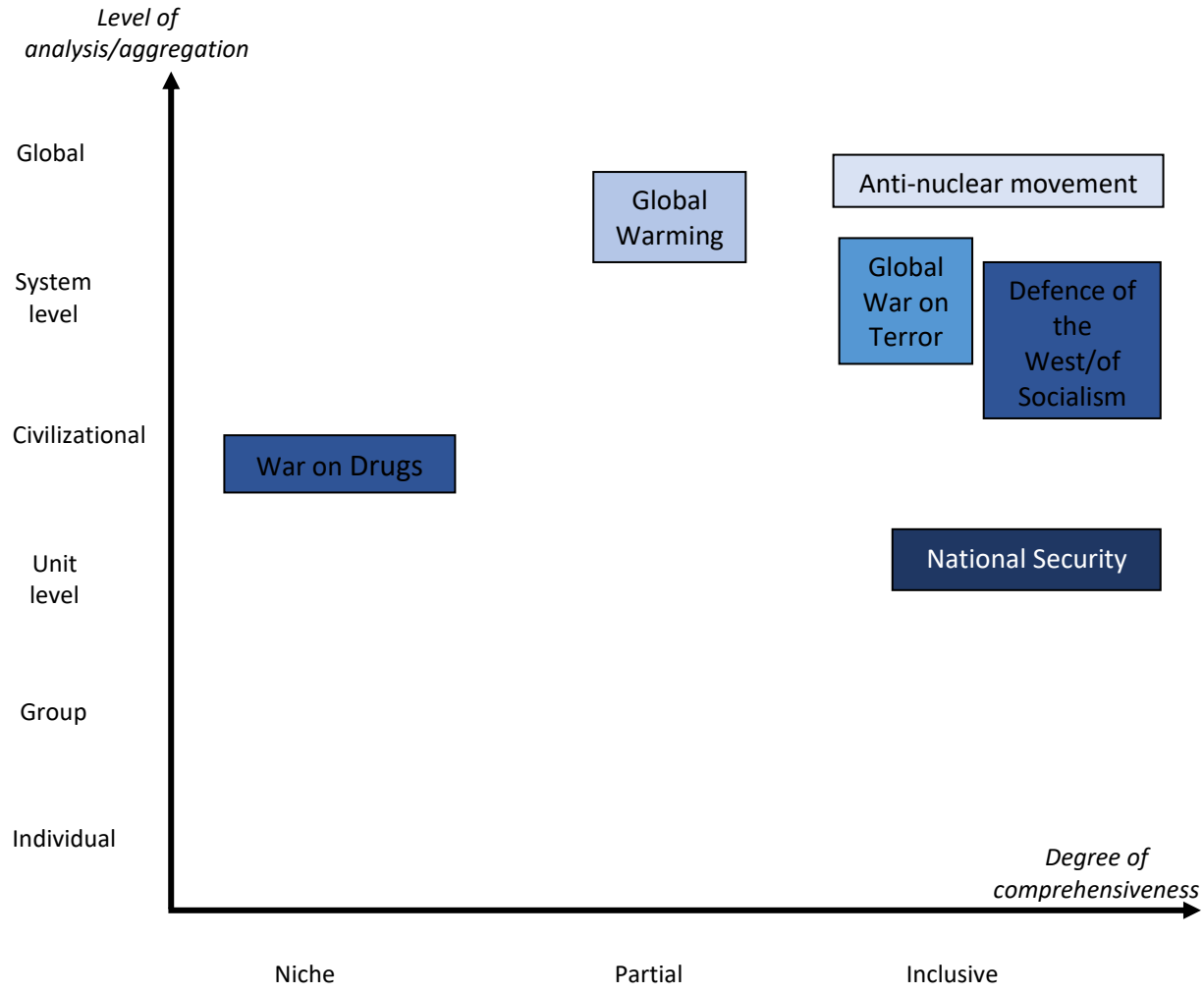
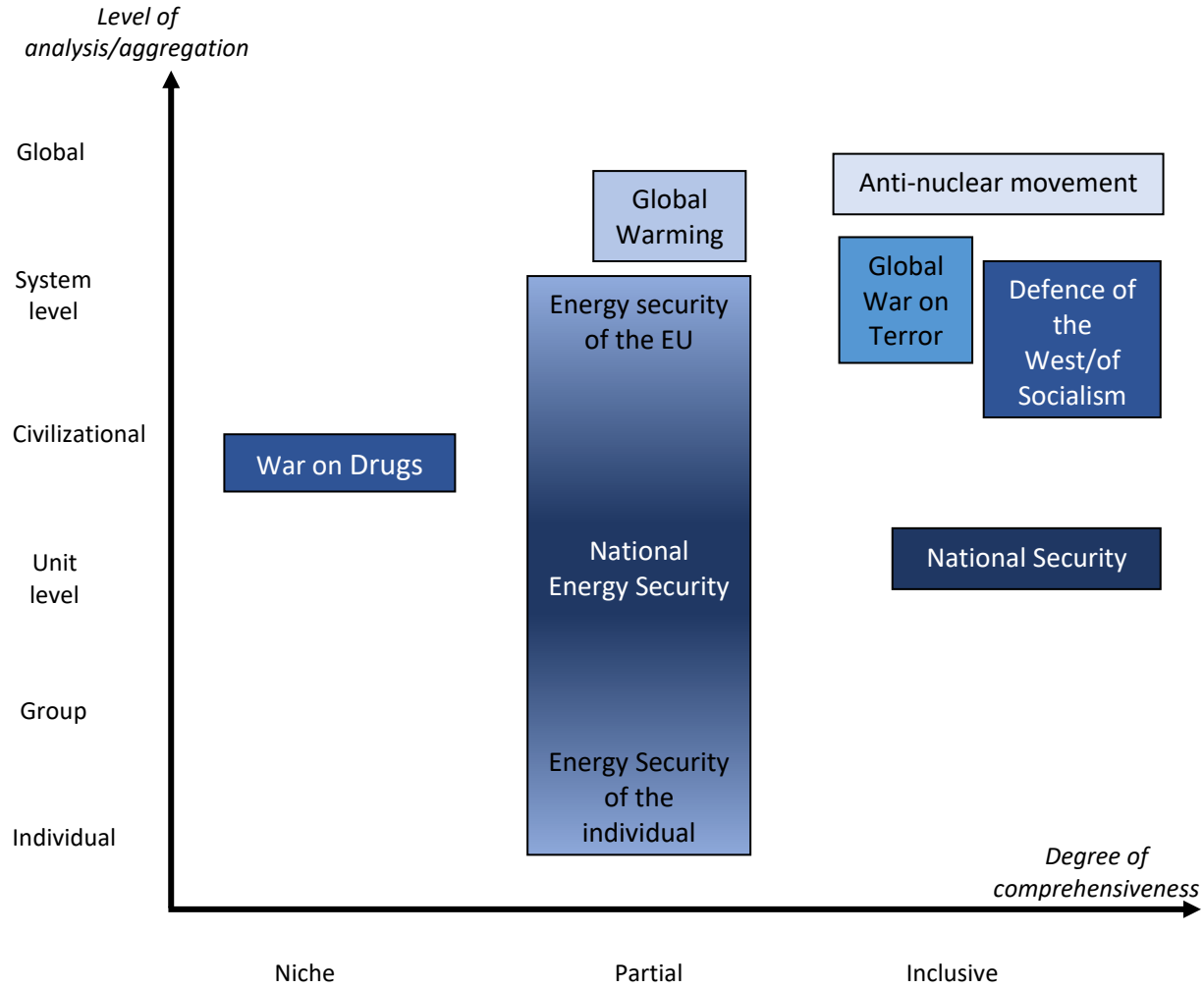


Fig. 1 as found in the article by Barry Buzan and Ole Wæver, *Macrosecuritisations and security constellations* (Buzan & Wæver, 2009, p. 259).

With my research, I aim to add the EU's energy security to this figure (Figure 2). As I am examining the energy security of the EU, the y-axis begins from the System level, which is the level of the EU. However, the EU consists of national states, so the y-axis goes down to Unit level, and as national states consist of individuals and care for these individuals (their citizens), the y-axis goes further down to almost the individual level. On the x-axis, the energy security of the EU has a partial degree of comprehensiveness, as it can be seen not only as an energy issue but as interconnected with other sectors, such as climate change/environmental security (cleaner fuels, less energy consumption, renewables), national security (military fuel, power plants, unhindered energy flows) and societal/human security (economical energy prices, energy disruptions). On the z-axis, which indicates the

power of the macrosecuritisation, the degree of support fluctuates depending on the level of analysis/aggregation, (for example, even if energy security policies are quite high on the EU agenda, there is considerable fluctuation among the EU members [e.g. Finland, Belgium and Poland] and much more among their citizens [e.g. lower class, working class and upper middle class]) but energy security discourse and concerns are constantly rising – or staying high – in the policy agenda of most EU members.

Figure 2: The three dimensions of macrosecuritisation: comprehensiveness, level and degree of support with multilevel energy security within the EU added. The darker the colour, the greater the degree of support.



As for any other securitisation, a macrosecuritisation needs securitising actors, convenient speech acts and an appropriate audience. Supplementary to these, macrosecuritisations need "*some expansive dynamic capable of subsuming other securitisations*" (Buzan &

Wæver, 2009, p. 265). In order for a macrosecuritisation to be generated, power alone is not enough. It also needs a higher-level referent object to facilitate the engagement and mobilization of identity politics among the system's actors. This could be achieved through the creation of a positive unification (for example, the common values among actors and identities) or by the creation of a negative unification, for instance, identification of a common threat. What is more, macrosecuritisations have to readjust and adapt to ever-changing global affairs. A successful macrosecuritisation can have immense rewards. First "*it can define, demonstrate and legitimate leadership*", second "*it can support claims to exceptionalism and special rights*", third "*it can facilitate and sustain alliance formation*", and fourth "*it can help to demarcate spheres of influence and boundaries of containment*" (Buzan & Wæver, 2009, p. 268).

The definition of desecuritisation according to the Copenhagen school is "*the progressive removal of issues from the security agenda as they are dealt with via institutions and practices that do not implicate force, violence or security dilemma*" (Krause & Williams, 1996, p. 249). Depending on the current securitisation status of an issue, there are three possible ways to achieve desecuritisation. First and foremost, we must prevent securitisation to happen at first place. Secondly, if the issue has already been securitised, we must "*keep the responses in forms that do not generate security dilemmas and other vicious spirals*". Thirdly, we have to try to remove the issue from the security agenda and exceptional politics and place it back into normal politics (Roe, 2004, p. 284).

Securitisation and desecuritisation, according to the Copenhagen School of Thought, is the spread of normal politics to exceptional politics and vice versa. Through securitisation, securitising actors have the capability to drive an issue into exceptional politics and then securitisation. But as Aradau argues, "*the question of desecuritisation therefore becomes one about the kind of politics we want. Do we want politics of exceptional measures or do we want democratic politics of slow procedures which can be contested?*" (Aradau C. , 2004, p. 393). Aradau pointed out that desecuritisation is harder to be achieved rather than securitisation, as gaining support from securitising actors and the audience is difficult. Securitisation is easier to achieve, as the audience can associate better with the claims made by the securitising actor (Aradau C. , 2004). For example, during energy securitisation

in Russia, the securitising actor (the government) used the suspicion of the audience (Russian citizens) towards the oligarchs and foreign investors (through a speech act) to legitimise large-scale governmental intervention within the energy sector. From this situation, desecuritisation would be understandably difficult, as the audience would not side with a speech act calling for desecuritisation. As a result, the issue remains securitised, under exceptional politics.

Desecuritisation could also be achieved through the transformation or management of securitised issues, as Paul Roe argues. The total relocation of an issue from the security agenda to 'normal politics' is a transformation of a securitised issue. On the other hand, an incomplete or a controlled desecuritisation could be achieved through the management approach (Roe, 2004, p. 285). Of note, Wæver argues that in some cases, securitisation is indispensable and, as a result, desecuritisation is not always beneficial, as "*securitisation might help society to deal with important challenges through focusing and mobilizing attention and resources*" (Wæver O. , 2011, p. 469).

This study examines how the macrosecuritisation of the energy security of the EU rose (power/energy cuts from Russia), is evolving (policy debates, new controversial infrastructure, confrontation among EU officials) and how it may decline (macro*de*securitisation) in the future (diversification of suppliers, new infrastructure, renewables, diplomacy). Even if desecuritisation of energy would benefit both the EU and Russia, the significance of energy for their economies would not allow energy issues to be completely removed from the security agenda. Macrosecuritisation is a great opportunity for foreign policy analysis and policy-making in Europe, especially in the field of energy, as the real power of the EU is its capability to build and maintain zones of peace and common rules.

3.5 EU Energy Security and Critical Infrastructure

Since 2014, the EU has been investing in infrastructure that unites its member states, to end their dependency on a single supplier (Russia). A recent example of this valuable interconnection infrastructure is the pipeline between Finland and Estonia, which has boosted the security of supply and brought revenues to the region. The EU is committed to building energy infrastructure that ensures that every member state has access to at least three different sources of gas.

When completed, the Balticconnector, the Estonian-Finnish gas interconnection, and the gas pipeline between Poland and Lithuania will enable Finland and the Baltic states to diversify their gas flows, safeguarding them against possible future supply interruptions. By 2020, €5.35 billion will have been invested in European priority projects under the Connecting Europe Facility (CEF). When completed, the projects will enhance the security of supply and contribute to market integration. The grant covers 75% of the construction costs, the maximum co-financing level permitted (European Commission, 2016).

"*The potential for catastrophic terrorist attacks that affect critical infrastructures is increasing*" (Eurogas, 2010). In 2013, the EC evaluated and analysed the most critical European infrastructures that are vulnerable to threats and identified these as: i) the EU's electricity transmission grid, ii) the EU's gas transmission network, iii) the EUROCONTROL[7] and iv) the GALILEO[8] (European Commission, 2013). It is worth mentioning that half of the critical infrastructure relates to energy flows while the other half relates to navigation. In addition, the EC mentioned that in 2012, many European owners and operators of energy infrastructure in the electricity, gas and oil sectors had faced an increasing number of attacks on their critical energy infrastructure, mostly in the form of thefts, vandalism and cyber-attacks (European Commission, 2012, p. 2).

The main argument in favour of ensuring fundamental protection of critical infrastructure has been outlined by Brian Bennett: "*Our modern society and day to day activities are*

[7] The European organisation for the safety of air navigation
[8] The European programme for global satellite navigation

dependent on networks of critical infrastructure – both physical networks such as energy and transportation systems and virtual networks such as the Internet. If terrorists attack a piece of critical infrastructure, they will disrupt our standard of living and cause significant physical, psychological, and financial damage to our nation." (Bennett, 2007, p. 9). This speech act towards securitisation of critical infrastructure highlights the disruption, interruption and failure that would be caused by such an attack. This approach to critical infrastructure protection is concerned with unpredictable and unexpected failure rather than ordinary, everyday failures and disruption (Aradau C., 2010, p. 16).

The Centre for the protection of National Infrastructure in the UK defines the critical infrastructure within states as follows: "*National infrastructure are those facilities, systems, sites, information, people, networks and processes, necessary for a country to function and upon which daily life depends. It also includes some functions, sites and organisations which are not critical to the maintenance of essential services, but which need protection due to the potential danger to the public (civil nuclear and chemical sites for example)*". Definitions of critical infrastructure include a wide range of aspects, including communications, emergency services, energy, finance, food, government, health, transport and water (CPNI, 2018).

The energy infrastructure sector can be divided into three subsectors. i) Electricity and the infrastructures and facilities required for generation and transmission of electricity. ii) Oil production, refining, treatment, storage and transmission via pipelines. iii) Gas production, refining, treatment, storage and transmission via pipelines and LNG terminals (Council Directive, 2008).

From computers and TVs to transport and energy infrastructure, everything has an eminent role in our everyday lives, so security experts argue that "…*the (core) rationality of Critical Infrastructure Protection is associated with physical objects*" (Dunn Cavelty & Kristensen, 2008, p. 11). Nevertheless, a European Commission Communication paper has pointed out that "*Not all infrastructures can be protected from all threats. For example, electricity transmission networks are too large to fence or guard*" (European Commission, , 2004). The European Commission Communication argues that critical infrastructure is "*the extent of the*

geographical area which could be affected, magnitude and effects with respect to time" (European Commission, 2004).

As Claudia Aradau has argued, "*Infrastructure is not opposed to people, but is materialized in intra-actions between humans and nonhumans, matter and meaning*", and "*The securitization of critical infrastructure reconfigures materialities in the world and creates new hierarchies and forms of exclusion. Interconnectivities and interdependencies do not exist independent of particular materialities… …these materializations of objects to be protected also intra-act with materialities of economic and geopolitical structures*" (Aradau C., 2010, p. 16).

3.6 Reflections

In this chapter, I have outlined the theory of the Copenhagen and Welsh Schools of thought and their relationships with the energy security of the EU. As Floyd argued, it is beneficial to keep the valuable parts from both critical schools rather than arguing about which school is better. In line with this argument, I use the best concepts from both schools to examine the widening of the security agenda to include environmental, energy and human issues, but at the same time, I scrutinise the role of societies in the Barents Region as a means of emancipation for the indigenous populations. This combination and use of theory without clear limits between the two schools, free me from the set borders and limits of the schools, enabling me to use mixed theory concepts in various case studies.

Chapter 4

Critical Security Aspects in the Barents Region

Environmental and Human security

4.1 Introduction

The first official use of the term 'environmental security' can be traced to the publication of *Our Common Future* in 1987 by the World Commission on Environment and Development (WCED, 1987, pp. 247-249). Traditional understandings of security have become less relevant to contemporary analysis of human insecurities, and environmental matters are increasingly at the forefront of public interest (Dalby S. , 1992). Environmental security has replaced the threat of global nuclear war, in the interest of the public, but these two areas share two characteristics: both have global effects and annihilating effects (Smil, 1997). Environmental security was initially established to address the deficiency of military security in this context (that is, sovereignty is meaningless because climate change cannot be stopped by or at national borders) and to move environmental problems from the level of 'low politics' to 'high politics' so that the problem can be tackled with more funds and responsibility from countries. Climate change and environmental degradation have been militarised, but the focus in this context is the potential violent conflict that could emerge as a result rather than the human or community insecurity that they create. Unfortunately, the majority of countries are focusing on external environmental threats rather than tackling their domestic threats to climate and environment, leaving incapable actors in charge of the potential disaster (Barnett J. , 2001) & (Barnett J. , 2003).

After the end of the Cold War, academics and researchers pushed for a broadening of the security agenda beyond state-centred political, military and economic issues. Among other 'new' securities that developed, such as environmental and health, was human security, in which humans and human societies are the referent objects. From the mid-nineteen nineties, the traditional structure of Security Studies was reformed. The referent object, the kind and the capacity of threats and the securitising actors were separated from the state, challenging the traditional way of thinking (Buzan, Wæver, & de Wilde, 1998), (Booth B. ,

2005a), (Peoples & Vaughan-Williams, 2010), (Williams P. , 2013), (Mutimer, 2013), (Collins A. , 2013), (Bigo D. , 2013).

In this chapter, I outline the debates that exist about environmental and human security in general and about the Barents Region. What is more, I point out the connection between Arctic changes and worldwide changes, including those that relate to islands thousands of miles away from the Arctic, as well as how the indigenous population define themselves through their unique societies. Within all this, the chapter demonstrates an important connection between the Barents Region and the EU.

4.2 Environmental Security and Climate Change

Even if there is no coherent definition of environmental security, Dalby outlined in 2002 four major factors that are important in developing environmental policy guidance. Firstly, the political elites have excessive impact on ecosystems, and they have great influence on policy decisions that relate to resource use and pollution. Secondly, the growing urban and global population depends increasingly on resources and food that are often produced in remote rural areas. Thirdly, global population growth and urbanisation is happening in the context of accelerating globalisation and an economy that is heavily dependent on petroleum and its products. Lastly, for transboundary economic and environmental matters, the state is often an inappropriate political entity for making relative judgements (Dalby S., 2002a, pp. 101-102). It has been thoroughly confirmed that conflict or war between states is very unlikely to result from environmental matters (Baechler , 1999), (Homer-Dixon & Percival, 1996), (Wolf , 1999).

Transformation of the political landscape in relation to energy resources could negatively alter antagonism among states. However, it is within rather than between states that environmental change is currently a prominent factor in conflicts between different groups. Consequently, the climate change and conflict research agendas are likely to be most valuable if it is focused within countries (Barnett J. , 2003). Of course, the discourse in relation to climate change is not unilateral, and shifts in geopolitics, energy and security affect its gravity in relation to policy deliberation (Dalby S. , 2015).

During the past 100 years, the link between climate and geopolitics has become very strong as a result of advancements in production and distribution of agricultural products in addition to the strong correlation between weather conditions and crop production. From estimations – made on the basis of satellite images – of Soviet Russian and North Korean harvests, till the arguments which support that it was the extreme drought which ignited the 'Arab Spring', all these are integral parts of contemporary geopolitics. Therefore, the crucial element of climate change geopolitics is the advancement of technology, as it improves our knowledge of Earth's climate behaviour and Earth depiction through satellite images and its alteration through the years (Dalby S., 2013). By 2007, the US considered climate change to be a crucial element of geopolitical analysis (Campbell, et al., 2007) & (CNA Corporation, 2007) & (Pumphrey, 2008). Extensive environmental degradation anywhere on the planet could lead to disruptions, wars and migration that raise security concerns in countries miles away from the source of the problem (Theisen, Holtermann, & Buhaug, 2011).

Climate change poses a security concern for few states, but for many communities and individuals with different characteristics within these states. The most severe examples are the Atoll countries Tuvalu and Kiribati, as climate change and sea-level rise would gradually diminish the ability of people to live on these islands owing to huge floods that put them below the surface of the ocean (Watson R. T., 2000), (Barnett & Adger, 2001), (Nurse & Sem, 2001).

The President of the Federated States of Micronesia has argued that the "*sea-level rise and other related consequences of climate change are grave security threats to our very existence as homelands and nation-states*" (Falcam, 2001). Apart from the island states, climate risks endanger the subsistence, cultures and health of millions of people all around the world, such as Arctic communities, for which hunting and herding are becoming more difficult owing to unpredictable snowfall and ice coverage (Barnett J. , 2003).

As the oceans are expanding quickly, many coastal or island states are facing severe floods or even annihilation (Uan, 2013). This is not disconnected from the shrinking of the Arctic's sea ice. The summers of 2007, 2012 and 2016 already showed us that the Arctic ice cup has

shrunk and is continuing to shrink. As Dodds argues, this transition is very important in relation to the geopolitical future of the colder regions of the planet (Dodds K. , 2008). Environmental change could be treated as a security issue depending on who is to be secured and what prominent threat arises as a result of climate change. To outline it clearly, "*which environmental problems can be considered security issues*?" (Shaw, 1996) & (Barnett & Dovers, 2001). Three major geopolitical developments concerning EU domestic and international affairs are being driven by climate change.

1) As the world is a violent place, environmental disruptions could lead to military actions against migration, famines, and to an extent, threats to European prosperity. (Welzer, 2012).
2) Further migration from rural areas to cities would intensify as a result of droughts, heatwaves and less stable patterns of precipitation (Parenti, 2011).
3) Peoples from rural areas reaching metropolitan states, due to imposed mobility of environmental change, could be depicted as threats if adapted measures are not in place. As a result, their human security relies much upon the permission of entry or not (Mountz, 2010).

To date, no conflict has resulted from climate change, but insecurity of peoples and subsistence has been caused in many areas of the globe. Such insecurities could lead to political unrest, which could require international intervention. Nevertheless, many researchers have argued that climate change is increasing the possibility of conflict. Another group of researchers have, however, argued that "*…attributing such causal powers to climate oversimplifies systems affected by many geopolitical and social factors*" (Sutton, et al., 2010) while Halvard Buhaug, a political scientist at the Peace Research Institute Oslo said that "*…climate variability is a poor predictor of armed conflict*" (Buhaug, 2010, p. 1). Moreover, Simon Dalby argued that "*While it is premature to suggest that climate is yet anywhere close to the most important entity for governance, the seriousness of what is coming implies that climate might become the next overarching principle."* (Dalby S., 2013, p. 44). Notably, placing climate change among the security discourse could lead to inappropriate measures and actions that are decided by political agencies rather than the product of serious political dialogue (Swyngedouw, 2010). "*Politics is not now just a matter of institutions, sovereignties, governance arrangements, parties, movements, leaders, and*

states. It is now unavoidably a matter of cities, pipelines, technological innovations, and discussions of the future configuration of the planet." (Dalby S. , 2014).

In recent years, discussion of environmental change has attracted more attention as a result of three developments. Firstly, the implications and dangers of climate change have been acknowledged by military thinkers and think-tanks, so severe climate impacts are now included in strategic planning. Secondly, in modern warfare, long fuel supply chains are vulnerable as targets. In an attempt to end dependency on oil, militaries are investing in solar-powered equipment and water purification systems so that, even without environmental protection as a primary goal, the military is going 'greener'. Thirdly, the number of scientists who accept that large-scale human developments have changed the balance and composition of not only the atmosphere but also of many other systems has expanded fast. One of these systems is the marine system, which is being transformed as a result of overfishing, pollution and acidification with unpredictable consequences for countless species, including humans (Dalby S. , 2014, pp. 9-10).

Abundant resources do not always lead to economic growth and political stability; on the contrary, resources are often a liability for the holder state. Examples have shown that states that are heavily dependent on the export of primary commodities face higher risks of political instability and violent conflicts (Ross, 1999) & (Collier, 2000). Examples to the contrary are very few, including oil in Norway and gems in Botswana. By contrast, many countries have developed peacefully in a resource-scarce environment; Japan is one of the greatest examples of a highly developed, resource-poor country (Le Billon, 2001).

Even as early as 2002, Dalby pointed out that solar and wind energy innovations connect ecology and human security. These innovations minimise the flow of materials through ecosystems, as the energy is provided by wind and the sun. There is no need for fossil fuel transportation or use, and, consequently, no atmospheric pollution. Additionally, solar panels and wind turbines can be installed close to where power is needed, further reducing the materials needed for energy transfer. In this way, the production and distribution of electricity are disconnected from fossil fuel imports, which often put local economies and social systems in turmoil (Dalby S., 2002a).

4.2.1 The Climate in the Age of Anthropocene

The post-industrial effects on the biosphere caused by humans are claimed to signal a new geological era, known as the Anthropocene (Crutzen, 2002). In that context, humans now determine the future climate changes of the planet and the wellbeing of millions of people. Therefore, the meaning of security has been re-evaluated according to a contemporary global framework (Barnett J., 2001), (Dalby S., 2002b), (Dalby S. , 2009), (Floyd & Matthew, 2013), (Hoogensen G. , Bazely, Goloviznina, & Tanentzap, 2014). "*The rich industrial carbon fuelled part of humanity is now determining the future course of the climate and not vice versa!*" (Dalby S., 2013).

Humans are transforming the biosphere, either indirectly by changing the air, or directly by deforestation, mining, agriculture and the expansion of urban centres. "*Environment is no longer simply the backdrop to human activities: it is increasingly the human-made context*[9] *for our lives*" (Dalby S., 2002a, p. 101). Ecology is a far wider issue than the environmental politics of each state (Litfin, 1998). The global economy itself is supported by resource and material flows, which are major factors in environmental change (Redclift, 1996). The multiple effects of an industrialised humanity of over seven billion people are pushing the limits of Earth's carrying capacity and its ability to provide a "*safe operating space for Humanity*" (Rockström, et al., 2009).

Environmental security, defined as "*the threats to national security that arise from environmental degradation*", has been distinguished from ecological security, defined as "*the human impacts on the security of the environment itself*." (Barnett J., 2001, p. 12). There are two options in this new Anthropocene era, which could be the major political dilemma of the next decades. First, there could be an evolution towards renewable energy-based cities, a focus on sustainable agriculture and reinforcement of our ecosystems against severe weather conditions. Alternatively, we could face oppressive economic measures and violence from the rich and powerful in order to preserve their privileges (Dalby S. , 2014).

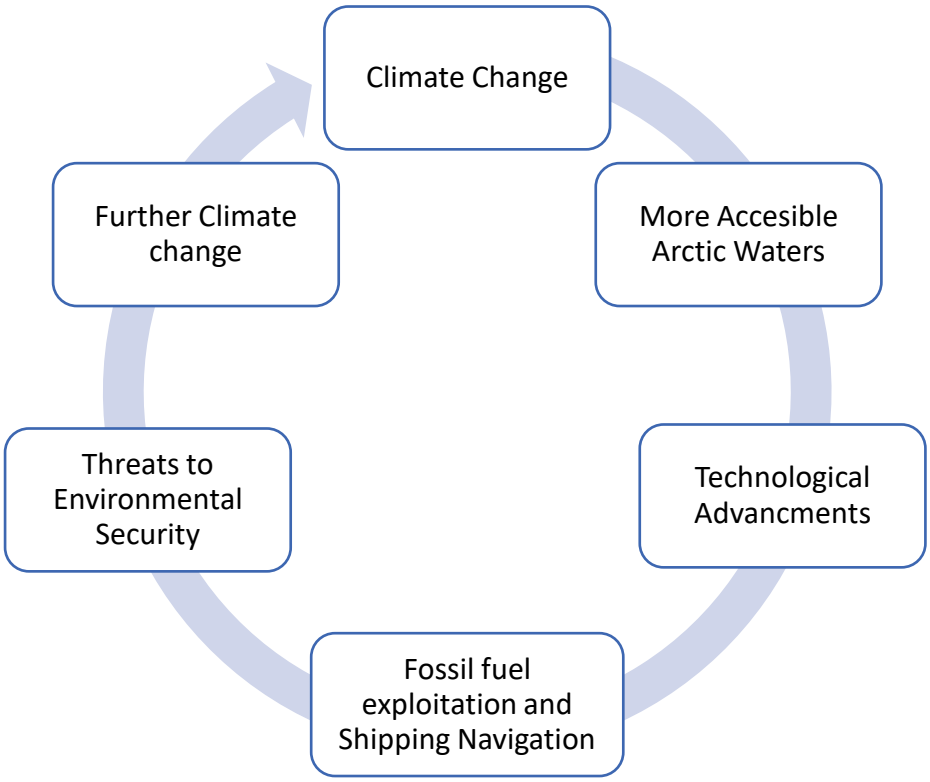
[9] Italics in the original

Recently, it has been argued that within the Anthropocene framework "*no conception of security can be sustainable that fails to address the relationship between human wellbeing and human-caused environmental change.*" … "*To be sustainable, security must be assessed against its role in contributing to or mitigating environmental change as it manifests in the Arctic and around the world*." (Greaves, 2016b, p. 660). It is a paradox that the actors who contest over fossil fuels, especially oil, are in reality contesting for one of the most significant causes of climate change. If one changes one's view of oil as a scarce resource that each world actor must secure, and instead sees it through the lens of climate change, it is obvious that there is no scarcity but that, on the contrary, there is an abundance of oil that is used with recklessness (Dalby S. , 2014). As would be expected, the social group that is most exposed to environmental change and to the turmoil caused by political violence is the rural poor (Renner M. , 1996).

4.3 Environmental security in the Barents Region

In the past decade, several reports have already stressed the climate-driven environmental, societal and economic changes that have taken place in the Arctic in the past three decades. The most prominent of these reports are *State of the Arctic Coast 2010: Scientific Review and Outlook* (Forbes, 2010)(Editor), the *Snow, Water, Ice and Permafrost in the Arctic* report (AMAP, 2011a), the *Arctic Pollution Report* (AMAP, 2011b), the *Arctic Resilience Interim Report* (Arctic Council, 2013a) and the *Climate Change 2014, Synthesis Report* (Larsen, et al., 2014). Some of the most critical climate trends in the Arctic that have global effects are presented below; these are mainly from the Arctic Climate Impact Assessment report in 2004 but also include additional findings from the *Climate Change 2007* report and the *Climate Change 2014, Synthesis Report*.

Figure 3: The Arctic Vortex among Climate Change, Resources Exploitation and Environmental Degradation



i. Increasing temperatures

Temperatures over the Arctic – particularly winter temperatures – have risen abruptly in the last decades. Winter temperatures in Alaska and western Canada have risen by 3–4°C in the past half century. Greater rises are expected to occur this century (ACIA, 2004, p. 10). The average increase in the temperature of the Arctic is expected to range from 2°C to 9°C by 2100, and will be greater during autumn and winter in the North, in the ocean and in areas where the ice is reduced or has gone (Anisimov, et al., 2007).

ii. Rising rainfall

Rainfall in the Arctic has risen by 8% during the past century and it occurs mainly in autumn and winter. More increases are expected in the next 100 years (ACIA, 2004). International precipitations are expected to increase by 10% during the 21st century (Anisimov, et al., 2007).

iii. Increasing river flows

River flows to the ocean have risen greatly in the Arctic during recent decades, and they are now happening earlier than spring. These changes are expected to speed up (ACIA, 2004). These river flows, combined with rainfall, lead to a 'freshening' of the surface of the ocean in the North latitudes (Anisimov, et al., 2007). Changes in Arctic freshwater flows affect sea-ice production, deep-water formation in the North Atlantic and regional climate. The most severe impact of the changes in river flows would be a change in the global thermohaline circulation (Anisimov, et al., 2001).

iv. Reduction of snow-covered areas

The areas of the Arctic covered with snow have been reduced by approximately 10% during the past 30 years. More reductions of approximately 10–20% are expected by the 2070s with greatest reductions occurring during spring (ACIA, 2004). The ratio of rain to snow will increase, especially in spring and in the sub regions of the Arctic in which the current temperatures are almost 0°C (Anisimov, et al., 2007).

v. Melting of permafrost

The permafrost has heated by approximately $2^{o}C$ during the past three decades and the surface area that melts every year is rising in many regions. The permafrost's southern limit is expected to move one hundred kilometres north in this century (ACIA, 2004). The expected increase in temperature on land has less seasonal variation than that of the ocean, but in developed areas of the Arctic, the increase might lead to costly damage to human infrastructure (Anisimov, et al., 2001), (Anisimov, et al., 2007).

vi. Decreasing lake and river ice

Later formation and earlier melting of ice in rivers and lakes each year have reduced the ice season by one to three weeks in some regions. This effect is more obvious in North America and Western Eurasia (ACIA, 2004).

vii. Thawing of glaciers

Melting of glaciers is taking place all over the Arctic. This process is very fast and is estimated to represent nearly half of the total loss of glaciers worldwide. It is also the biggest contributing factor in the global rising of sea levels (Anisimov, et al., 2001), (ACIA, 2004).

viii. Retreating summer sea ice

The area of the sea covered with ice in the Arctic has reduced by approximately 15–20% in the past 30 years. This decrease is about to accelerate, and elimination of sea ice during the summer months is expected to occur towards the end of the century (ACIA, 2004). The loss of sea ice in the summer will change the humidity in the north seaside regions and is likely to affect the pace at which glaciers melt, as they are currently surrounded by sea ice most of the time. Where loss of sea ice occurs, there will also be increases in the movement of ice by the wind and in the mixing of ocean water (Anisimov, et al., 2007). What is more, the tree line, shrubs and grasses have moved northwards in several Arctic areas (Larsen, et al., 2014).

ix. Sea level increases

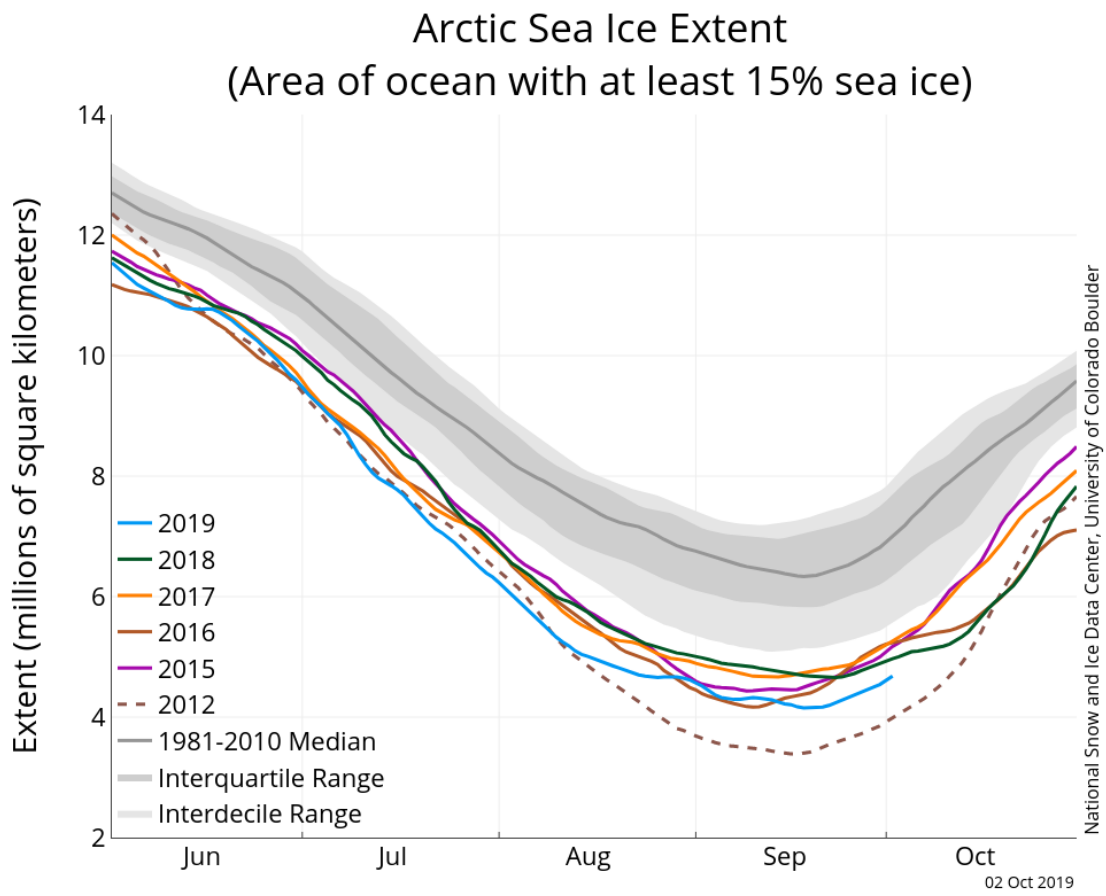
The sea level has increased by 10–20 cm in the Arctic and worldwide in the past 100 years. An average further increase of 50 cm is expected this century. The rise in sea level in the Arctic is expected to be greater than the global average (ACIA, 2004).

x. Change of ocean salinity

A decrease in salinity and density has been seen in the North Atlantic Ocean, caused by melting ice and an increasing amount of fresh river water. If these changes continue, ocean

circulation patterns could change, which could, in turn, influence the local climate (ACIA, 2004).

Figure 4: Arctic Sea Ice Extent (Area of ocean with at least 15% sea ice)



(NSIDC, 2019)

In addition to the ten effects described above, one current environmental problem in the Arctic is the release of methane, a major greenhouse gas. The increase in temperature is believed to have dramatically accelerated the release of gas from the ocean and the Arctic lakes. In addition, melting of the permafrost has given bacilli access to previously frozen carbon from fossils that they biodegrade. When this degradation happens in air, it produces carbon dioxide (CO_2), but when it occurs in marshes or swamps, it produces methane (Fothergill & Berlowitz, 2011, p. 237),

Environmental security has to be treated as a major aspect of a thorough Arctic security concept (Heininen L., 2014) as "*It appears that we care very little about the health threats*

that pollution of the Arctic represents… …research on the Arctic receives little attention" (Anderssen & Gabrielsen, 2005) as found in (Hoogensen G. , Bazely, Christensen, Tanentzap, & Bojko, 2009). Nature and humans are inherently connected, as humans depend on nature not only for food and drinking water but also for relaxation and leisure. For indigenous populations, nature is also a core part of culture, and culture is affected by nature (Washington, 2013). The first international institutions that contributed to giving indigenous populations a strong voice, by permanently including them in their structures, were the Barents Euro-Arctic Cooperation (BEAC) and the Arctic Council, (Koivurova & Hasanat, 2009).[10] Compared with previous international cooperation and participation of indigenous people in international organizations, this move was relatively new (Hasanat, 2006). And "*…even though final decisions are made by the Arctic states in consensus, the permanent participants must, according to the Declaration, be fully consulted, which is close to a de facto*[11] *power of veto should they all reject a particular proposal*" (Koivurova & Heinämäki, 2006, p. 104).

Although climate change could have devastating effects, it could also create opportunities. The seas may become more populated with marine species, and the milder climate would enhance agricultural productivity. The opening of the Northern Sea Route means it is already useable, and this is decreasing transportation distances, times and ultimately costs of shipping (ACIA, 2005). Nevertheless, "*whether a particular impact is perceived as negative or positive often depends on one's interest*" (ACIA, 2004, p. 8) but it is predominantly argued that the negative consequences of climate change dominate over any positive results (ACIA, 2005), (IPCC, 2014).

Both global and local changes, such as global climate change and regional industrialisation, have an effect on the Barents Region. Financial wealth alone is not enough to evaluate the well-being of an individual or a community; the preservation of cultural values, which are

[10] The indigenous peoples of the Arctic are being represented by 6 Indigenous Peoples Organizations in the Arctic Council: Aleut International Association (AIA), Arctic Athabaskan Council (AAC), Gwich'in Council International (GCI), Inuit Circumpolar Council (ICC), Russian Association of Indigenous Peoples of the North (RAIPON), Sámi Council (SC). While decisions in the Arctic Council can only be made by the members, which are the 8 Arctic states, the permanent participants may participate in all meetings and shall be consulted before any decision is made (Arctic Council, Member States, 2015). In this position IPOs have more political weight than other, non-Arctic nation states, which can only take part in the Council as (permanent) observers.

[11] Italics in the original

inherently connected with the nature, is also a very important aspect (Zojer & Hossain, 2017). In the Barents Region, there are currently a few questionable developments. Increasing use of machines such as snowmobiles is making traditional activities such as herding more convenient, but also contributes to pollution and increases costs, further burdening the environment and people who cannot afford them. Similarly, emerging economic activity, such as tourism or extracting industry, provide new jobs and infrastructure, yet the environmental burden increases disproportionately to the quality of life (Zojer & Hossain, 2017). What is more, it was reported in 2012 that more than 20,000 oil spills take place every year in Russia, and most of them do not have any consequences for the operators (Staalesen A., 2012).

It has been observed that when states are trying to secure their entire population, they sometimes generate local insecurities; as Kristoffersen and Dale have pointed out, "*national politics aiming at securing the whole (national) population can be seen as opposing*[12] *locally based security*" (Kristoffersen & Dale, 2014, p. 215) In the Barents Region, development policies should prioritise the interests and needs of the local communities, and the interests of the states should follow. (Zojer & Hossain, 2017)

4.4 Humans at the Barents Region

Barents security issues that are the subject of research used to be tied to the traditional security threads of the military, economics and political instability, which are inherently connected with the state (Buzan, Wæver, & de Wilde, 1998), (Wilson Rowe, 2009), (Byers, 2010), (Tamnes & Offerdal, 2014). The major reasons for this were the history of the Arctic in the Cold War and the great abundance of natural resources in the region. Some Arctic states have characterised these resources as being crucial to their national security (Heininen L., 2011), (Heininen L. , 2013b) and resource abundance is known to be an issue that can lead to conflicts or wars (Le Billon, 2001). Nevertheless, Arctic resources have not been a cause of hostilities to date (Le Mière & Mazo, 2013), (Hilde, 2014). The problem with focusing on traditional security aspects is that this approach does not take into account any

[12] Italics in the original

social or environmental issues, which directly affect the indigenous and non-indigenous populations of the Arctic. For these populations, climate change, environmental degradation, economic development, industrialisation, integration into global markets, erosion of cultural traditions, disputes over political autonomy and conflicts over land use are more prominent dangers than military danger (Arctic Human Development Report, 2004), (Heininen L. , 2010), (Le Mière & Mazo, 2013), (Heininen L. , 2013a), (Arctic Human Development Report, 2014), (Hoogensen G. , Bazely, Goloviznina, & Tanentzap, 2014).

In Arctic Norway, the biggest city is Tromsø with a population of approximately 74,500. The Arctic counties of Norway are Nordland, Troms and Finnmark on the mainland, the Svalbard archipelago and the island of Jan Mayen, with a total population of approximately 470,000, or one tenth of Norway's population. In West Arctic Russia, there are three major Arctic cities; Murmansk with a population of approximately 300,000, Norilsk with population of over 170,000, and Vorkuta with population of approximately 60,000 (The Arctic, 2017). The regions of West Arctic Russia include the Murmansk and the Arkhangelsk oblasts, the Karelia and Komi republics, the Nenets autonomous Okrug and the Yamalo-Nenets autonomous Okrug. The combined population of these regions is approximately 4.2 million.

The Sámi are an indigenous people who live in Norway, Sweden, Finland and Russia. More than 37,000 Sámi live in Norway, but as there is no overall registration of the Sámi population, it is difficult to know exactly how many Sámi there are. The Sámi can be found throughout Norway, but the most robust Sámi settlement areas are north of the Saltfjellet Mountain and the Arctic Circle (Statistics Norway, 2012). In Russia, there are multiple indigenous populations for which there are estimated numbers: 60,800 Karelians, 2,000 Sámi, 6,000 Veps, 293,500 Komi-Zyrians, 125,000 Komi-Permyaks and 44,600 Nenets. Komi and Karelians are not considered indigenous to Russia, so the estimated total of inhabitants that are considered to be indigenous population is 53,500 (Demoscope, 2002), (Federal State Statistics Service, 2010).

As the UN has pointed out, "*Most people derive security from their membership in a group – a family, a community, an organization, a racial or ethnic group that can provide a cultural identity and a reassuring set of values*" (United Nations Development Programme, 1994).

This interrelationship between individuals and communities has been described by the Copenhagen school as societal security, which concerns "… *the ability of a society to persist under changing conditions and possible and actual threats. More specifically, it is about the sustainability, within acceptable conditions for evolution, of traditional patterns of language, culture, association, and religious and national identity and custom".* In a nutshell, "*Societal security is about situations when societies perceive a threat in identity terms*" (Wæver, Buzan, Kelstrup, & Lemaitre, 1993, p. 23). As a result, the referent object to be protected in this context is the collective identity of a distinct group of people – a society (Buzan, Wæver, & de Wilde, 1998).

The main institution for inter-state cooperation within the Arctic Circle is the Arctic Council, a continuation of the Arctic Environmental Protection Strategy (AEPS), which was a multilateral, non-binding agreement among Arctic states on environmental protection in the Arctic. The AEPS was adopted in June 1991 by Canada, Denmark, Finland, Iceland, Norway, Sweden, the Soviet Union and the United States. The AEPS deals with the monitoring, assessment, protection, and conservation of the Arctic zone and preparation for an emergency incident. It was a great political achievement in the post–Cold War period (Broadus & Vartanov, 1994), (Russell, 1996). The last AEPS meeting was held in 1997 in Alta, Norway, following absorption of the AEPS into the Arctic Council in 1996, and resulted in the Alta Declaration (Ministers of the Arctic countries, 1997).

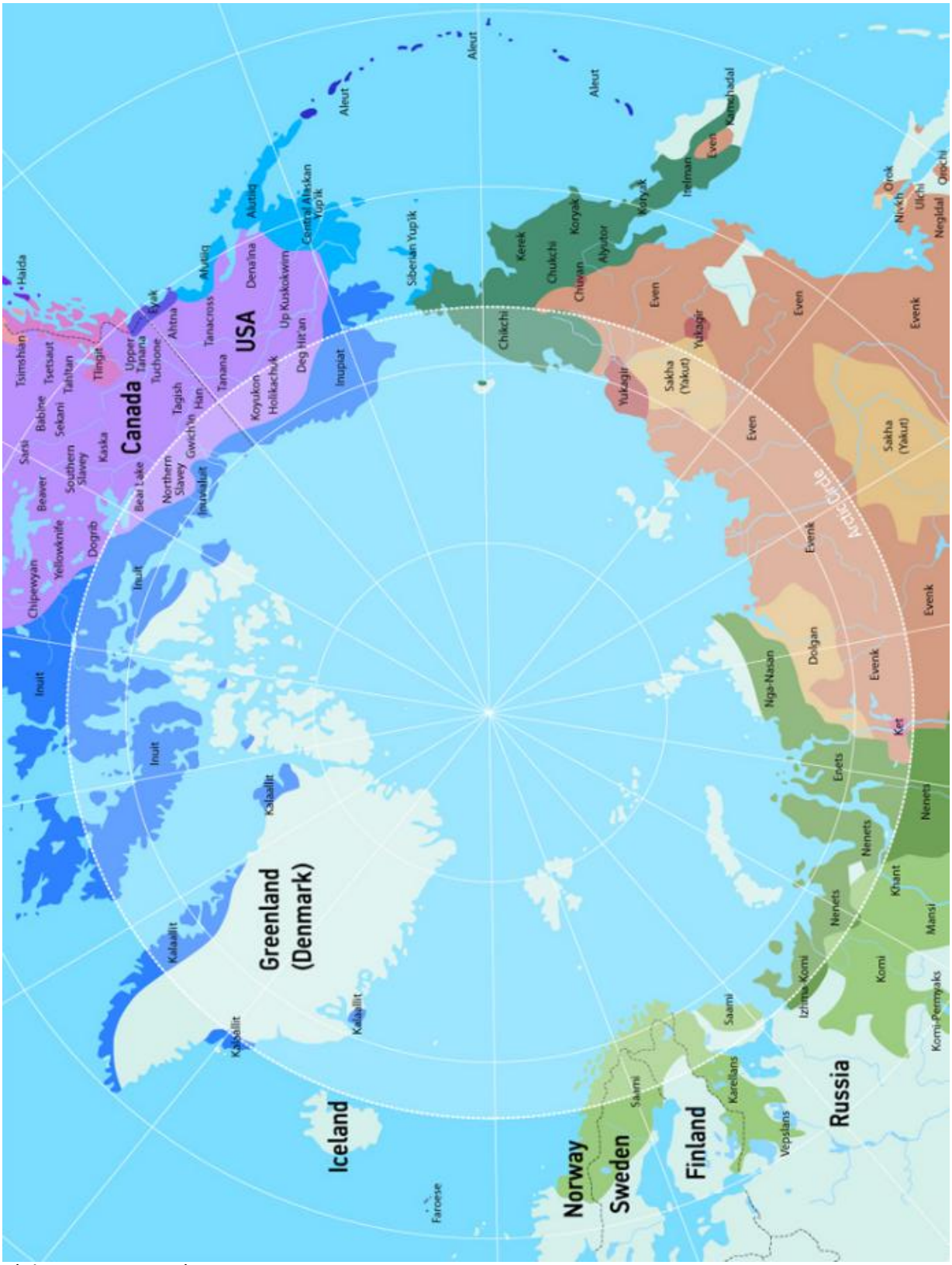
The 1996 Ottawa Declaration established the Arctic Council as a forum for advocating collaboration, coordination and communication among the Arctic States, with the inclusion of indigenous people and other Arctic populations in relation to issues such as sustainability and environmental protection. The Arctic Council has also organised and supervised studies on environmental change, oil and gas usage, and Arctic shipping, and it is the main body that facilitates communication between indigenous peoples and other non-governmental organizations (Arctic Council, 2015), (Arctic Council, 2017). The Arctic Search and Rescue Agreement (or *Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic*) was the first binding treaty among the Arctic states, signed on 12 May 2011 at Nuuk, Greenland (McIntoch, 2011). The second treaty was the *Agreement on Cooperation*

on Marine Oil Pollution Preparedness and Response, signed on 15 May 2013 at Kiruna, Sweden (Arctic Council, 2013b), (Farré, et al., 2014).

As Zellen has pointed out, the Arctic was always interconnected with the security of Europe and North America, but there was no discussion specifically about Arctic's security (Zellen, 2009). However, this situation has changed for three major reasons. Firstly, the Cold War has been over for almost 30 years, so there is no fear of confrontations between superpowers in Arctic waters. Secondly, with the end of the Cold War, the security agenda and the understanding of security among academics, researchers and policy makers have broadened. Lastly, the traditional approaches to security proved inadequate for addressing the new security challenges and threats that have developed during the past three decades. These changes have made clear that human security is the preferable tool for analysis of contemporary Arctic security, "*placing human beings and communities as both referent objects and securitising actors and allowing for a new approach where Arctic security can be considered truly Arctic*" (Hossain, Zojer, Greaves, Roncero, & Sheehan, 2016, p. 8).

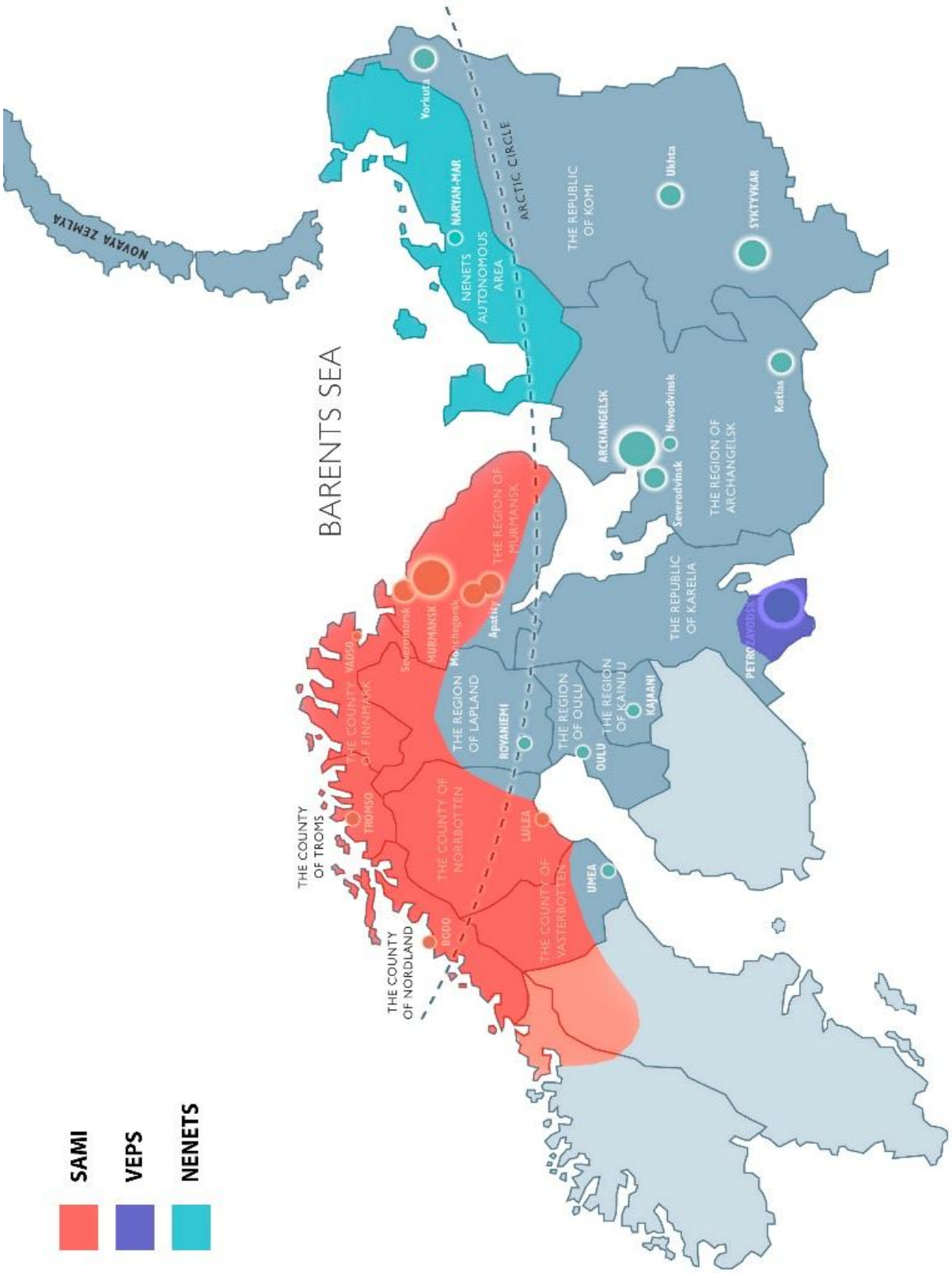
As security has become a human issue, we have become concerned not only with survival of the state but also with the survival and well-being of individuals and their communities (United Nations Development Programme, 1994). Nevertheless, even after almost 30 years of academic debate, the role of the state and other actors in the individual's freedom from fear (for example, of physical harm, death) and freedom from want (for example, of food, shelter, personal identity, spiritual beliefs and communal belonging) remains unclear (Centre for Security Studies, 2011).

Map 5: Indigenous Populations in the Arctic



(The Arctic, 2017)

Map 6: Indigenous Populations in the Barents Region



(Vassilieva, 2017)

4.4.1 Debates on Human Security

The theory and the literature on human security have been criticised for being too abstract and abstruse (McSweeney B. , 1996), (Smith S. , 2005), as human security is part of the evolution of a widening and deepening the security agenda (Buzan, Wæver, & de Wilde, 1998), (Buzan B., 1991), (Buzan & Hansen, 2009). Nevertheless, the common ground among academics, policy-makers, the public and military advisors today is that "*threats do not only come from other states, but also from within states from non-state actors and from non-military and non-violent sources related to environmental, health, economic, and societal challenges*" (Hossain, Zojer, Greaves, Roncero, & Sheehan, 2016, p. 3).

"*Human security can be said to have two main aspects. It means, first, safety from such chronic threats as hunger, disease and repression. And second, it means protection from sudden and hurtful disruptions in the patterns of daily life – whether in homes, in jobs or in communities. Such threats can exist at all levels of national income and development*" (United Nations Development Programme, 1994, p. 23).

A powerful document in relation to international human rights was the Vienna Declaration and point of action, which "*made clear that human rights are universal, indivisible, interdependent and interrelated, and committed States to promote and protect all human rights for all people regardless of their political, economic, and cultural systems*." (UNHR, 2013, p. 9). Specifically, the Vienna Declaration has a designated chapter for the indigenous populations and a thorough paragraph that supports every aspect of any indigenous society within a state. "*The World Conference on Human Rights recognizes the inherent dignity and the unique contribution of indigenous people to the development and plurality of society and strongly reaffirms the commitment of the international community to their economic, social and cultural well-being and their enjoyment of the fruits of sustainable development. States should ensure the full and free participation of indigenous people in all aspects of society, in particular in matters of concern to them. Considering the importance of the promotion and protection of the rights of indigenous people, and the contribution of such promotion and protection to the political and social stability of the States in which such people live, States should, in accordance with international law, take concerted positive steps to ensure respect*

for all human rights and fundamental freedoms of indigenous people, on the basis of equality and non-discrimination, and recognize the value and diversity of their distinct identities, cultures and social organization." (The Vienna Declaration, 1993).

Former UN Secretary General Kofi Annan also referred to the issue of human security. "*Human security, in its broadest sense, embraces far more than the absence of violent conflict. It encompasses human rights, good governance, access to education and health care and ensuring that each individual has opportunities and choices to fulfil his or her potential. … Freedom from want, freedom from fear, and the freedom of future generations to inherit a healthy natural environment*" (Annan, 2000).

The Commission on Human Security provided its own definition of human security in 2003. "*Human security has to protect the vital core of all human lives in ways that enhance human freedoms and human fulfilment. Human security means protecting fundamental freedoms — freedoms that are the essence of life. It means protecting people from critical (severe) and pervasive (widespread) threats and situations. It means using processes that build on people's strengths and aspirations. It means creating political, social, environmental, economic, military and cultural systems that together give people the building blocks of survival, livelihood and dignity*" (Commission on Human Security, 2003).

Of course, the applicability of human security has been criticised. Arguments have ranged from the idea that human threats could be anything, and as a result you secure nothing, so it means nothing (Paris, 2001), (Krause K. , 2004) to the idea that "*individuals are not free standing, but only take their meaning from the societies in which they operate: they are not some kind of bottom line to which all else can or should be reduced or subordinated*" (Buzan B. , 2004, p. 370). As a resume, human security is not a proprietorship of an individual; on the contrary, it is the interrelationship among individuals, their communities and the state (Rothchild, 1995, p. 61). In this context, consequential human security can be achieved at the level of human communities rather than the individual, even if these communities do not fully correspond with state boundaries, which is common among indigenous and/or nomad peoples.

Finally, as the theory of human security has been developed by western scholars, it has been accused of being *"… a service offered by the global north to the global south, defined by the global north (scholarship and policymaking) and distributed by the global north*" rather than "*… a concept that is relevant the world over, dependent upon context and relations of dominance*." (Hoogensen & Stuvøy, 2006, p. 216). Along the same lines, the human security discourse has been criticised because it detects threats to the population of the developed world (Chandler, 2008), thereby defining human security as a Western narrative, adjusted to the global south and other developing regions (Duffield & Waddel, 2006).

4.5 Human Security at the Barents Region

Critiques that are analogous to those described above exist in relation to the relevance of human security discourse to the Arctic indigenous populations. For example, Franklyn Griffiths drew a parallel between the application of human security from the global north to the global south and from the global north to the Arctic (Griffiths, 2008). The distinction between western-centred human security and Arctic-centred human security has been clearly outlined in the Arctic Human Development Report in 2004 (Einarsson, Nilsson, Young, & Larsen, 2004). Western-centred human security "*… starts with the individual and asks how individuals are faring in terms of any number of criteria like life expectancy, education, material well-being, and so forth*." On the contrary, Arctic related human security "*… starts with the community or the social group and views human development through the lens of community viability. Successful individuals are those who make major contributions to the well-being of their communities*" (Arctic Human Development Report, 2004, p. 241). Suggestions that human security is better outlined as societal security had already been stressed in 1995 by Ole Wæver. "*Society is about identity, the self-conception of communities, and those individuals who identify themselves as members of a particular community*" (Wæver O. , 1995, p. 67). At the same time, some researchers argue that human security is adequate for application to Arctic security issues (Greaves, 2012a), (Hoogensen G. , Bazely, Christensen, Tanentzap, & Bojko, 2009).

The best approach when trying to examine or apply human security to the indigenous populations of the Arctic is to facilitate a bottom-up approach, in which we listen to their voices. In this way, their fears, major concerns, perceptions and wants will be incorporated into the theory of human security, leading to meaningful approaches and policies.

If we accept the idea that human insecurities are not present in efficient and democratic states (such as Norway, Sweden and Canada), as non-critical human security theory suggests, we would never examine the insecurities of minorities and marginalised communities within rich states with high security capabilities (Greaves, 2012b). Critical human security theory thoroughly examines developed states in order to outline the reasons and practices that cause human insecurity for their vulnerable inhabitants, such as the poor, ethnic minorities or other marginalized populations (Newman, 2010). With this approach, even if the state's national security is efficient, human security for all individuals within the state is not assumed.

Given that the term security has historically been connected with the state and military, there is a danger that securitising an issue will leave it exposed to militarisation. In this regard, human security advocates are the securitising actors and argue that individuals ought to be the referent object of security policies (Floyd R., 2007a). Also, through the rationale of securitisation, it can be considered that individuals have to be protected via exceptional measures, such as humanitarian aid or responsibility to protect (Watson S. , 2011). Economic and human development ought to prompt macroeconomic changes, improve lives and increase job opportunities for those for whom the development is designed.

Human security studies have been proven as a good method of analysis for the Barents area, which consists of North Scandinavia and Northwest Russia. In 1993, cooperation in the Barents Region was bolstered by the establishment of the *Barents Euro-Arctic Council* and the *Barents Regional Council* for intergovernmental and interregional matters respectively. These institutions promote peace and stability in the region where traditional security, such as state security, that focuses on territorial integrity and border militarisation, could not. Maritime safety, education, culture, transport, energy, trade, environment, health and

industry are endorsed through their initiatives (Barents Euro-Arctic Council, 2017b), (Barents Euro-Arctic Council, 2017c), (Barents Euro-Arctic Council, 2017a). As one might expect, there are huge differences between the West and the East provinces of the Barents Region (that is, the Scandinavian Barents and the Russian Barents) which remain from before the Soviet Union and concern standards of living, language and culture, religion, history and political and economic traditions (Castberg, 1994, p. 101), (Zimmerbauer, 2013, p. 94).

The Barents Region is unique in that NATO (Norway) and the former Soviet Union had a common border from 1949, of more than 190 km that was heavily militarised. However, by advocating regional cooperation and cross-border synergy, the "*involved countries signalled an important shift from hard security priorities to an alternative and diversified security approach which included emphasis on regional political cooperation, cross-border human contacts and the formation of common regional identities*" (Rafaelsen, 2013, p. 486). Today, the insecurities are not violent confrontation or interstate or intrastate conflicts, but concerns about socio-economic insecurities, education and health issues, climate change, and the expanding modernisation on northern and indigenous identities (Greaves, 2016a).

Even within the Barents Region, there are smaller sub-regions and societies with unique characteristics and challenges and their own wants and fears. "*Risks and insecurities are case- and person-specific, and partly subjective, so human security analysis requires listening to people's 'voices', their fears, perceptions, including the 'voices of the poor' but also of the rich*" (Burton, 1990), (Burgess, et al., 2007), (Gasper , 2014, p. 34). As an illustration of this argument, the wants and fears of the coastal Sámi are not the same as those of the reindeer herding Sámi. Similarly, the circumstances faced by Sámi in Norway, Sweden, Finland and Russia are very different, and relate to the challenges of living in urban or rural areas. These are some of the most important distinctions that need to be considered to enable a comprehensive analysis of human security in the Barents Region (Hossain, Zojer, Greaves, Roncero, & Sheehan, 2016).

In the report *Action Plan for Indigenous Peoples in the Barents Euro-Arctic Region 2013–2016*, published by the '*Working group of indigenous peoples in the Barents Euro-Arctic*

region', it was pointed out that "*The present increased selection of resources does not necessarily lead to development of the local communities and indigenous peoples' communities, but rather to problems of industrial, environmental and social kind. National and international corporations establish activities in the areas of the indigenous peoples without involving the local inhabitants and the users of the areas in an overall strategy. The regional administrations often prioritise development of central areas, and that leaves the indigenous population with next to nothing*" (WGIP, 2012, p. 13).

Traditional ways of life for the nomadic Nenets people on the Yamal Peninsula, in Russia, are being threatened by the exploitation of the world's largest natural gas reserves below the ground in this area (Business Insider, 2015). It has been confirmed by reports that the rights of the indigenous people are being abused if major development and resource extraction business take place near their area (Anaya, 2011). What is more, in the Arctic, there are areas with no easy access where the levels of poverty are soaring. In such remote areas, there is an inadequacy of financial resources, infrastructure, and services, so the populations cannot benefit from centralised development projects and the job opportunities they could offer (Tennberg, et al., 2014).

The indigenous peoples of North America and the Barents Region share values that connect them across disparate geographies. Conservation of these values and identities is key for the survival of the indigenous societies and promotes a sense of security among its members. A thorough approach to security, while taking into account the well-being of individuals, must engage with the threats to the community and societal security (Hossain, Zojer, Greaves, Roncero, & Sheehan, 2016).

The effects of continuous developments not only affect traditional ways of life but also transform the identities of the indigenous populations' communities, endangering their societal security which in this case is inherently connected with the environment and thus, with environmental security. For example, reindeer herding is an emblematic feature of the Sámi social structure, as it is for the Nenets indigenous populations (Seurujärvi-Kari, Pedersen, & Hirvonen, 1997, p. 21), (Pennanen, 2002, p. 60), (Aarsæther, Riabova, & Bærenholdt, 2004, p. 136). However, climate change and new developments that change

land use pose a great threat to reindeer herding owing to loss of grazing land and unpredictable weather patterns, which distort the migration patterns of reindeer (Magga, Mathiesen, Corell, & Oskal, 2011), (Koivurova, et al., 2015). A loss of herding activities could irreparably affect the northern communities and the identities of the people within them, "*as their language, cultural artefacts and spirituality are inherently connected to reindeer herding*". (Pennanen & Näkkäläjärvi, 2002). There are also many coastal Sámi populations for whom fishing is the equivalent of reindeer herding, and local fishing is also under threat as commercial fishing vessels move further north as the waters become more accessible (ACIA, 2005, pp. 696, 699-701). As Exner-Pirot argued, "… *the preservation of indigenous culture is the paramount security issue from the perspective of Arctic indigenous groups themselves*" (Exner-Pirot H. , 2012, p. 4).

Non-traditional security theory can be applied to non-indigenous Arctic populations who also live in vulnerable communities that face the same challenges as indigenous people. Environmental and societal security, both of which are non-traditional security challenges, are often co-dependent and intermutual, and as long as climate change and environmental degradation threatens herding and fisheries, the fragile communities that depend on them will be threatened too. For this reason, it is important not to underestimate aspects of security that threaten survival of these societies, and this is why environmental security and human security are examined together in this chapter.

It has been shown clearly that almost none of the threats that Arctic populations face can be addressed with narrow definitions of security or human security (Exner-Pirot H. , 2012, p. 3). The notion of human security has been criticised in the same way as the concepts of '*order'*, '*justice'*, and '*freedom*' (Smith S. , 2005) and the suggestion has been made that security does not mean anything. On the contrary, human security it is a very valuable and comprehensive tool regarding a specific framework, as well as during a specific timeline and environment to which it is being practised (Bain, 2006). "… *Extended human security must become the goal of national governments in their domestic affairs if it is to mean anything much*" (Griffiths, 2008, p. 57) and "*To maintain and improve community security, it is important that local inhabitants are offered a chance to participate in local decision-making processes*" (Zojer & Hossain, 2017).

New security concepts do not relate to states but do not relate to individuals either. Instead, they relate to the societies and communities that have to be protected (societal security) along with their individuals, even if the boundaries of these communities do not correspond with the boundaries of states. The Arctic indigenous people build their identities through their communities, so these very communities, which are facing cultural, environmental, economic and political threats, must be protected (Hossain, Zojer, Greaves, Roncero, & Sheehan, 2016).

Finally, in relation to the Arctic migration route from Russia to Norway, which is part of the greater migration crisis in Europe, building fences to stop refugee flows and migration indicates a lack of policy response that will make the life of the least secure people more difficult as a result of violent conflicts, wars and climate change. At the same time, it makes clear that the political will is unable to handle new circumstances. "*Invoking sovereignty, territorial control, and using violence to militarily control borders may provide a short-term political solution to the problems of change, but it is at best a violent temporary response to the symptoms of a much larger transformation*" (Dalby S. , 2014, p. 10).

4.6 Reflections

This part of the literature and the corresponding result chapter is not directly connected to the energy security of the EU. Nevertheless, given that the EU publishes Arctic policies concerning the Arctic environment and development of Arctic populations, it would be wrong to omit them from my holistic approach to analysis of the EU and the Barents Region. Furthermore, as energy exploration, exploitation and transportation have a direct impact on Arctic communities, the EU must evaluate its contribution to this impact (that is, importing vast amounts of oil and natural gas from the Arctic) and take appropriate measures to ensure sustainable development, not only among its member states but also in the adjacent neighbourhood. Moreover, it can be argued that Arctic human security relies on the community-level security, which subsequently relies on environmental protection, such as protection of fisheries and herding. The next chapter is a chronology of the Barents Region which outlines the area under analysis comprehensively.

Chapter 5

A Historical review of the Barents Region

5.1. Introduction

In this chapter, the historical, political and geographical aspects of the Barents Region are presented to provide an understanding of the contemporary status of the region. History is a crucial aspect of every region under examination in the context of political geography and international relations. In this context, the use of maps helps with understanding the geographical positioning, borders and the positions and movements of important sites. For these reasons, I have used a holistic history literature review together with maps of resources exploitation, fisheries, environmental protection and co-operation in the Barents Region.

The Barents Sea is a peripheral sea of the Arctic Ocean adjacent to the Atlantic Ocean. Together with the White Sea to the East, it covers an area of approximately 1.5 million km^2 (0.9 million square miles). The southern limit is the coast of Fennoscandia, and at the Eastern limit are the Severny and Yuzhny islands and the Novaya Zemlya archipelagos. To the North, the limits are the Franz Josef Land and Svalbard archipelagos, and to the West are the Norwegian Sea and the Atlantic Ocean. The average depth of the Barents Sea is 230m, including shallow sand banks and basins of up to 600m. The weather conditions are harsh, with unexpected, unusual, unpredictable and severe weather patterns which change rapidly as a result of the cold Arctic climate. Nonetheless, the majority of the Barents Sea is free from ice all year round because of the northern branch of the Gulf Stream that reaches the northernmost coasts of Norway.

Life, including plants, fish and mammals, is abundant in the region, and includes uncommon flora and fauna and endangered species, such as polar bears and whales. The resources of the area have been exploited extensively both by local populations and modern states, especially since the 16^{th} century, when Dutch and British explorers discovered the Barents Sea while trying to discover a northern sea route to Asia. After the mid-1980s, whaling and

sea mammal hunting increased in the region and the fishing industry flourished owing to the introduction of echo-locators on large fishing boats. Besides living resources, the continental shelf of the Barents Sea has valuable deposits of natural gas and oil and projects are being developed by Russia and Norway to exploit these underwater deposits in their territories. Sea traffic is increasing every year, only as a result of increasing Russian exports of heavy oil and liquid natural gas (LNG) from the White Sea and the Barents Sea but also because more cargo ships are using the route to connect EU ports with Asia.

In medieval ages and until the 16th century, the Barents Sea was known as the Murman Sea, and was of importance not only for trade but also for socio-cultural relations among the indigenous Sámi people, other indigenous societies and European settlers. One of the most prosperous and well-known international trades of the region was the Pomor trade between the northernmost parts of Norway and the Pomor communities in the White Sea (Heininen L., 2016, s. 76).

The strategic importance of the Barents Region increased in the 20th century, during the Second World War. Supply convoys used the area to link Western Allies with the USSR, and German Navy submarines were used to disrupt this route. With the Cold War, the whole Arctic became militarised, and the Barents Sea became the border between the two rival blocks. The year-round ice-free waters of the Barents Sea were the only corridor for Soviet Union to the Atlantic Ocean. As a result, the USSR assembled large quantities of nuclear weapons in the northern ports and nuclear tests were carried out in Novaya Zemlya. Also, during the Cold War, activity of Soviet nuclear submarines intensified along with the development of US anti-submarine measures. Consequently, many nuclear accidents occurred in the region as well as uncontrolled deposition of radioactive waste into the sea.

The Barents Sea retained its strategic importance for Russia even after the end of the Cold War, as it provides access to the Arctic and Atlantic Oceans. Even today, a large fleet of Russian nuclear submarines and conventional warships are moored in naval bases on the Kola Peninsula and the White Sea. Moreover, the port of Murmansk, which is in the Barents Sea, is considered to be one of Russia's most important ports economically and commercially, as it combines a year-round ice-free port with a railway that connects to the

rest of Russia. The late 1980s saw the beginning of regional co-operation for environmental protection of the Barents Sea and, as a result, the Barents Euro-Arctic Region (BEAR) was established in 1993. This process was facilitated by the traditions of trade connections and co-operation. However, Norway and Russia are currently more and more sceptical about wide co-operations in relation to national interests such as military defence and exploitation of mineral resources.

With energy security set to be an important geostrategic factor in contemporary world politics, the Barents Sea has been referred to as a "big oil playground". However, the environmental risks in the region are rising not only as a result of industrial exploitation but also from increasing volumes of oil and gas transportation. Currently, the most challenging difficulties for the marine environment and for the well-being of people and societies in the region are environmental hazards and the need for a more sustainable fishing industry (Heininen L., 2016, s. 77).

5.2 The Barents Region after the World War II

Although the area of the Barents Sea is just the 7% of that of the Arctic Ocean, it is highly important in relation to economic exploitation. The transport of water, heat and salt through the Barents Sea is vital for the Greenlandic, Icelandic and Norwegian Seas and for their fisheries and for the whole Atlantic as well. However, pollution of the Barents Sea is harmful to the marine environment and to the economy of the Barents Region. Countries with major fishing fleets operating within the Barents Sea, particularly Russia, Norway, Iceland, the Faeroe Islands and a few EU countries, are alarmed about the health of the Barents Sea (Sigurdsson, 1997, s. 130).

The Barents Region is of particular interest in the context of the Circumpolar North for many reasons. Firstly, in relation to the oceanographic regime, exchange of water from the south and water that originates from the High Arctic occurs in the region. The Barents Sea is influenced by taking in relatively warm Atlantic water, which maintains the unfrozen conditions on the northern coast of Fennoscandia. Marine life is abundant in the Barents Sea, which is considered the most productive fishing ground in Northern Europe.

Consequently, fisheries within the Barents Sea are of significant economic benefit to Norway, northwest Russia and all of Europe. In addition to fisheries, the Barents Region contains rich reserves of non-renewable resources, particularly natural gas and oil. These hydrocarbons belong to Norway and Russia; in Norway, they are located offshore, and in Russia they are located offshore and onshore, in the Barents Sea and at the Pechora Basin of the Archangel Oblast. Even as early as 1997, Lange argued that the significance of those deposits, which were already being exploited to a substantial degree, to the Russian economy would increase dramatically in the subsequent years (Lange, 1997, s. 193).

After WWII and by the mid-1950s, most northern regions of Europe had been rebuilt successfully, laying the foundations for more economic development. The traditional northern communities of the Arctic, which had been characterised by socio-cultural closeness, were influenced by migration during and after the War, and this closeness reduced. Moreover, interactions during and after the War led to further national and international integration of the northernmost territories, and militarisation became a key factor in the political and socio-economic development of the region, which was very important in the Cold War arena (Elenius, 2015a, s. 334).

Conflict between the Eastern and Western blocks and the accompanying militarisation contributed to bring the local communities in the Barents Region, into global politics. In the meantime, ongoing industrialisation and modernisation resulted in integration of northern territories into their respective nations, which invested in big, national infrastructural projects. Migration played an important role in the region at this time. People of the northern Russian territories integrated into the socio-cultural space of the USSR as a result of migration from other Soviet regions. By contrast, populations in northern Norway, Sweden and Finland moved south, including a large amount of migration from Finland to southern Sweden. Nordic co-operation enables formation of the North Calotte co-operation in 1971, which was organised through conferences, specific associations and boards. The North Calotte allowed co-operation between groups in the northern Soviet Union with their counterparts in the Nordic countries, a unique opportunity for co-operation and interaction across the Iron Curtain (Elenius, 2015b, s. 365).

Towards the end of and after the Cold War, new colleges and universities were founded in the Barents Region, mainly in the regional centres. This development signalled radical changes in social structure and industrial approaches to create a society of communication and learning, mostly in the western Barents Region. Culture in the region was also strengthened by the founding of new institutions such as theatres, museums and science centres, highlighting the uniqueness of northern regional identities. As a result, the cultures of many ethnic groups became stronger. An outstanding example is the fact that between the 1970s and 1990s, the Sámi were not only officially recognised as an indigenous people in Norway, Sweden and Finland, but Sámi parliaments were established in these countries. In addition, Norway ratified the International Labour Organisation Convention 169 for the strengthening of indigenous rights. In the 1980s, the Finnish-speaking Tornedalian minority in Sweden and the Kven minority in Norway founded political organisations of their own.

Throughout the 1960s and 1970s in North Russia, regionalisation movements were conjointly active but much of the cultural distinctiveness of its ethnic minorities remained lost. A cultural revival among these minorities was initiated only within the last years of the Soviet Union and continued after its breakdown. However, there were clear differences from the changes that took place in the Nordic countries. The economic and social groups within the Nordic countries allowed for personal enterprises as well as for several different political parties. This flexibility led to a versatile financial setup and created the potential for use of a range of political means to alter the course of industrialisation. By contrast, the state corporations in North Russia existed within a planned economy and their activities were supervised and controlled by local party officers who had a negative impact on the potency of economic management.

Despite continued industrialisation throughout the 1970s and 1980s, North Russia kept its subordinate role within the Soviet economy as a supplier of raw materials to the more industrialised central parts of the state. The economic recession and social unrest in the late 1980s in the USSR were proof of a deep crisis within the authoritarian political system, which eventually led to the collapse of the USSR. In the late 1980s, each local and regional co-operation across national borders in north Europe was enhanced because of the North Calotte co-operation, which involved North Russia progressively more. Cultural co-operation

across the Soviet–Finnish and Soviet–Norwegian borders was also enhanced within the already robust tradition of regional co-operation between the nations, societies and settlements of the northern areas. Other vital issues in this period were environmental concerns and ecological awakening in Europe, caused by water and air pollution from trade, industry and agriculture, together with increased radiation and accidents from nuclear power plants and nuclear-powered submarines. Although in the 1980s the Kola Peninsula remained a crucial geo-strategic and military defensive structure for the USSR, in a speech in Murmansk, Mikhail Gorbachev, president of the Soviet Union at the time, declared the Arctic a peace zone and proposed tighter civilian co-operation between Norway, Sweden, Finland and the USSR.

After the dramatic dissolution of the USSR in 1991, new opportunities arose and permitted an unprecedented increase in international co-operation in the region, which enabled the foundation of the Barents Euro-Arctic Council (BEAC) in January 1993 (Elenius, 2015c, ss. 415-416).

With the end of the Cold War, the strategic importance of Murmansk region fell significantly, and the Russian Northern Fleet was reduced by more than 50% in 10 years. However, North Norway remained vital in national strategic and military planning and for NATO. In 2010, the Barents Region was still very important in the strategic thinking of the foremost nuclear powers, notably the United States and Russia. Canada, Norway and the United Kingdom (as a non-regional power) also preserved military forces and activity in the High North.

Environmental problems introduced another dimension to security and risk analysis after the Cold War. Russian nuclear waste storage and continuing industrial pollution in the Barents Sea and the Kola Peninsula triggered huge economic investments by Norway, the EU and G8 countries in the 1990s and the early 21st century. This investment led the residents of the region to regard it as a shared pool of resources for future generations and promoted multinational co-operation between NGOs within the Barents Region.

In the time since, the population has declined throughout the Barents Region, particularly on the Russian side. The transformation to an increased knowledge-based production has modified the socio-cultural pattern of society. Part of this modification has been a fast growth in higher education in combination with the globalised economy and information structure that has made it easier to collaborate across regional and national borders. On the other hand, these changes have also caused marginalisation of rural areas. Demands at the provincial level to preserve standards of welfare of the northern communities led to reorganisation of the regional space into larger units. As a result, national minorities and indigenous populations have reinforced their rights beyond the co-operative and common framework of the Barents Region to the legal frameworks of the EU, the UN and Russia.

The optimism of cross-border co-operation in the early 1990s switched to more of a 'wait and see' approach in the late 1990s. The solid international demand for raw materials and power resources improved the economic scene in Northern Russia, although living costs increased in tandem. In the first decade of the 21st century, a growing trend for larger Nordic investments in north-western Russia was observed. Regional co-operation between universities and various higher academic institutions has continued and been enhanced. In the meantime, the business co-operation was downgraded as a priority in the BEAR in order to facilitate people-to-people co-operation. Maybe the most prominent impact in terms of future co-operation was the large flow of individuals in all directions across national borders after 1993. Ultimately, the humans who perpetually cross cultural and national boundaries and traditions have created the vision of today's Barents Region as a commonplace in which the residents of the North could live their lives (Elenius, ss. 443-444).

5.3 Political History of the Barents Region

The eight discrete counties that make up the Barents Region (Norland, Troms, Finnmark, Norrbotten, Lapland, Murmansk, Arkhangelsk and the Republic of Karelia) are all under special policies and regional measures in their respective countries. In various ways, all these provinces are considered 'crisis areas' because of pollution and population decline. The potential benefits of development of the Barents Region are clear; however, we should

be equally aware of the potential risks and the severe issues that need to be eliminated to achieve positive results from the Barents' development (Dellenbrant & Olsson, 1994, s. 12).

The counties of the Barents Region share a variety of features: a very cold climate, a short growth season, little, scattered vegetation, simple ecosystems, long winters and a sporadic population. All the counties have indigenous populations and similar histories, providing a valuable foundation for their contemporary and future co-operation (Engstad, 1994, s. 20). Similarly, natural resources are abundant in all the counties and form the corner stone of the economy of the region. The abundant fisheries of the Norwegian coast and the Barents Sea enabled the foundation and development of most settlements in northern Norway. Similarly, Kiruna, Arkhangelsk, Northern Sweden and Finland depended on timber, and Murmansk on fish and minerals. However, the opportunities in this region come with the risks: exploiting the resources of the North is a difficult process that requires substantial investment in production and infrastructure. In addition, the surrounding Arctic is extremely vulnerable and fragile, and, once damaged, tends to be slow in recovering (Engstad, 1994, s. 23).

Within the geopolitical context of the mid-1990s, north-western Russia had the benefits of its location at the boundaries of the federation and its access to the open sea. As a result, north-western regions of Russia adapted more easily than most regions of Russia to the demands of international co-operation and it was more financially stable, with more resources to rely on (Engstad, 1994, s. 25).The region started to differentiate from the state itself, and a diversity of integration processes were supported by regional mobilisation (Wiberg, 1994, s. 30).

The Barents Region is divided politically, economically, ethically and linguistically, and covers such an enormous geographical area that considerable attention should be devoted to social and cultural exercise if co-operation is to be developed successfully. Improvements in the region's cultural identity and a joint profile towards the rest of the world are key to successful growth of the region (Wiberg, 1994, s. 38)

Sustainable development in the Barents Region must take into account the special values of this area as an untouched and clean natural environment, a scarcity in the European continent. An unspoiled environment and freedom from artificial noise ought to remain characteristics of the region in the future, and exploitation of the region's assets ought to be carried out in a manner that allows this (Österholm, 1994, s. 157).

Economic development within the region and in the adjacent Arctic areas without exposing the natural environment to any harm is a reasonable expectation. However, an improved economy of the region might be necessary to diminish environmental pollution in the region. In every development, the vulnerability of the environment must be considered and risky activities, such as oil drilling in the Arctic sea or land, should be avoided altogether. Strategies for resource exploitation should be developed in a way that protects nature. The notion of untouched nature is probably the most valuable resource within the Barents Region. This is a rare quality of nature in a densely populated continent like Europe (Österholm, 1994, ss. 162-163).

As Buzan and Jonson have argued, to guarantee the external security of a country requires reduction or elimination not only of threats from abroad, but also of vulnerabilities within the country (Emmerson, 2011), (Jonson, 1994). Internal vulnerabilities to external security can be reduced through financial development and political stability. Accordingly, external security strategies must be implemented outwards and internally. International co-operation is thought to be a way to enhance national security; however, it could also be seen making the country less protected against influences and control from abroad. A national security policy must, therefore, take both aspects into account (Jonson, 1994, s. 165).

Military security is the major obstacle in international co-operation. Once regional leaders planned to develop co-operation with their Nordic neighbours, one concern was that the Russian central leadership in Moscow could create difficulties to the development of cooperation. Nevertheless, the long road to international co-operation within the Euro-Arctic region had begun (Jonson, 1994, s. 181)

Given that the Kola region is vital for Russia in times of peace (owing to ice-free, open-sea harbours), it would be even more vital under crisis circumstances. Consequently, it is virtually impossible to demilitarise the region. Many Nordic countries, Norway in particular, cannot escape this reality and need to consider the numerous Russian threats in the formulation of their security policies. This is one of the major reasons that security policy is excluded from the Barents Region co-operation agreement. Nevertheless, even if security policy is excluded from the agenda for co-operation, developing a region in Northern Europe will be increasingly difficulty (Käkönen, 1994, s. 187). Given the role of the Barents Region within the international system and the fact that its global profile is rising, offshore energy resources are particularly vital for the region.

The structures for co-operation and research that were developed needed to be sturdy and tailored to withstand cycles of the political climate. They also needed to encourage advancements in international relations and maximise benefits for the Arctic, but also take into account contemporary developments and what might be achieved in the short term. In addition, they needed to allow assessment of the pay-off for science, and therefore the environment, in the long-term. Patience, resources and enthusiasm were needed at the outset of the process in 1994 (Karlqvist, 1994, s. 227).

Among the most significant bases for co-operation in this arrangement is the natural resources in the Barents Region. Nevertheless, attention must be paid to the fact that the countries in the north have robust national interests tied to their legislative bodies, and these interests must be respected. Therefore, the key themes for co-operation within this strategically vital region are justifiable resource exploitation in tandem with respect for environmental concerns to preserve the region's stability. Even though military tensions have been reduced, the strategic significance of the region has not faded (Hanevold, 1994, s. 234).

In the Arctic, the local population plays a crucial role in stability, even in relation to the security policy. Moreover, stability is dependent on how the residents experience their relationship with the central authorities and the rest of the world. The long-term impact of what the Arctic residents understand as a campaign directed against them and the natural

resources, they have harvested for generations is difficult to assess. The same issue applies to the question of market access for fishery products and fishing quotas. If individuals who live in the region get the impression that they are constantly losing large amounts of their authority in relation to the natural resources in the region, this could form the basis for future serious conflicts between the periphery and the centre of a state. Such conflicts could strongly influence the foreign and security policies of the countries involved (Hanevold, 1994, s. 235).

From 1994, forecasts about the Arctic development stressed the large Arctic energy reserves and the importance of the local population in the social context. In 1994, Hanevold stressed that the importance of the Arctic region as a reservoir and provider of natural resources, not only renewable but also non-renewable resources, could increase and that it is vital that developments occur at a rate that is respectful of the interests of the population in the region, in terms of political co-determination and the distribution of wealth derived from the exploitation of resources. He also pointed out that there would be potential for conflicts and opportunities for co-operation and that preparation would be needed to prevent conflicts of interest between northern and southern Norway and among Arctic governments and countries outside the region that have an immediate interest in the Arctic. The widest achievable, reasonable and concrete co-operation arrangements between the Arctic countries supported by the political authorities were the aim in the subsequent era. "*And if co-operation arrangement itself will not be conflict-free, I am convinced that it will have a positive impact on the future security-policy climate in the Arctic*" (Hanevold, 1994, pp. 235-236). Similarly, Rawlingson argued in favour of co-operation, saying that "*Rivalries and sectarianism in the Barents are counter-productive and self-defeating. More will be achieved – for everyone– by freedom of information, open doors and cooperation. Multilateralism and cooperation should be the watchwords of all sectors in the region*" (Rawlingson, 1997, s. 145)

5.4 Contemporary developments in the Barents Region

In the late 1980s, industrialised, militarised and political divisions in the Barents Region began to dissolve. Especially after the end of the Cold War, peoples and societies in the

Arctic and the Barents Region strengthen their collaborations in low-level politics, for example in the fields of science and environmental protection. Arctic co-operation has enhanced greatly over the past 30 years, as Mikhail Gorbachev predicted in his speech in 1987. The eight Arctic states – Canada, Denmark (including Greenland and the Faroe Islands), Finland, Iceland, Norway, the Russian Federation, Sweden and the USA – promoted the establishment of the International Arctic Science Committee (IASC) in 1990 and the Arctic Environmental Protection Strategy was adopted (Hoel & Heininen, 2016).

After the end of the Cold War, Arctic collaboration and region-building flourished. As a result of the Arctic Environmental Protection Strategy (AEPS), the Arctic Council was established by the eight Arctic states in 1996. The Arctic Military Environmental Cooperation (AMEC) was also established by Norway, the Russian Federation and the USA in 1996 and the co-operation on technical issues increased. Many other international organisations and forums for the Arctic have since been established, such as the University of the Arctic in 2001. At the regional level, intergovernmental cooperation strengthened through the Barents Euro-Arctic Cooperation (BEAC) which was initiated in 1993 between Norway, Denmark, Sweden, Iceland, Finland, Russia and the European Commission. At the same time interregional cooperation strengthened through the Barents Regional Council (BRC). The overall objective of Barents cooperation has been sustainable development (Barents Euro-Arctic Council, 2017b).

The growing international co-operation in the Arctic region could be considered the first modern important geopolitical alteration within the Arctic. By the beginning of the 21st century, the co-operation had increased, mainly through inclusion of non-state actors, and the emphasis for Arctic states was on region building to shape a new kind of relationship between the Barents Region and the rest of the world. Eventually, this co-operation reduced military tensions and increased political stability, meaning the Barents Region became a place where human concerns were a major priority. The Arctic sustained its status as a peaceful area with high stability and without inter-state struggles (Hoel & Heininen, 2016, pp. 319-320).

The adoption of the AEPS and the Declaration on the Protection of the Arctic Environment in June 1991 strengthened circumpolar co-operation in establishing programmes to monitor the environment. This achievement means that today there is much more knowledge about the ecosystems of the region, not only at a national level but in relation to the Arctic as a whole as well.

The foundation of the Arctic Council bolstered international co-operation within the Arctic. Arctic Council research is carried out in six working groups: 1) Arctic contaminants action programme, 2) monitoring and assessment of the Arctic environment, 3) conservation of Arctic flora and fauna, 4) emergency preparedness and prevention, 5) protection of the Arctic marine environment, and 6) sustainable development. Addition of the last group changed the profile of the co-operation to include environmental protection and sustainable use of Arctic resources. These working groups have published a lot of major research; for example, the Arctic Climate Impact Assessment (ACIA), which helped towards understanding the effects of climate change in the region, and the Arctic Human Development Report (AHDR), a comprehensive evaluation of human development throughout the entire region.

In an Oil and Gas Assessment, the Arctic Council studied the difficulties of exploiting fossil fuel reserves in the region. In their Arctic Marine Shipping Assessment (AMSA), they produced an overview of current shipping activities and relevant future developments while different forms of pollution were also examined. These studies have been the most significant outputs of the Arctic Council projects to date and have increased knowledge about the Arctic region considerably. In this way, co-operation in the Arctic is contributing to a mutual understanding of common challenges related to, for example, climate change and its impact on marine shipping in the Arctic. This common understanding acts as a catalyst for efficient responses to such challenges.

At the ministerial meeting at Nuuk, Greenland, in 2011, the ministers of foreign affairs for the eight Arctic member countries signed a legally binding treaty related to search and rescue operations in Arctic waters – the Search and Rescue (SAR) agreement. The need for this treaty was determined by the Arctic Marine Shipping Assessment, which involved

researchers and stakeholders from all Arctic countries. Similarly, at the 2013 ministerial meeting in Kiruna, Sweden, a task force to develop an Arctic Council action plan on oil pollution prevention was established, drawing on recommendations from the Prevention of Arctic Marine Oil Pollution Project (Hoel & Heininen, 2016).

In the 21st century, the Arctic and the Barents Region remain peaceful, enhanced by the international co-operation that grows continuously in the Arctic. The Barents Region in particular is legally and politically divided by fixed national borders between the Arctic states. The major element of the stability in the Arctic is, therefore, not the balance of military power but the trans-border co-operation of the states. Nevertheless, asymmetric environmental conflicts exist in the Arctic, such as the desire of indigenous peoples to protect the sensitive Arctic environment against increasing demands to exploit natural resources and development of the technology to enable this exploitation. Therefore, it is now very important for Arctic states to place an emphasis on their co-operation to strengthen their national security and economic interests.

Although the Arctic is perceived by many as a territory that is covered by permafrost and ice-covered waters, the Arctic Council's definition of the region includes areas that are significantly further south than Oslo, Stockholm and Helsinki, such as the Faroe Islands in the North Atlantic. This broad definition can be explained in economic terms, as the waters of the North Pacific and North Atlantic are free from ice and contain abundant natural resources. Though the Central Arctic Ocean is covered with ice, the seas around it – such as the Bering and Barents seas, the waters around Iceland and the Northwest Atlantic – contain vast amounts of living marine resources. In these regions, there are also oil and gas development areas, some of which are already being exploited. Global attention on the Arctic is rising in tandem with prices of oil and minerals. Given that the region harbours large amounts of oil and gas, it is assumed that it will play an important role in energy security of the reserves' holders and of the EU. Other important variables in the region are dramatic reductions in sea ice coverage and mass and the consequences for marine life and inhabitants. In addition, geopolitical changes, such as increasing circumpolar co-operation and the increasing importance of geo-economics and globalisation, are among the most important issues of the area. Moreover, many non-Arctic countries are turning their

attention towards the North. China, Japan, South Korea, France, Germany and the UK have increased their interest and their activities in the Arctic and are expecting more engagement with the ongoing international co-operation in the Arctic.

Two more factors influence international co-operation in the Arctic region. First are the interconnected issues of rapid climate change, an increase in the use of natural resources, the use of new sea routes, and the strategic need for energy security. National strategies of the Arctic states have been developed with regard to these changes. The second is an increase in international attention on the Arctic and its natural resources. Consequently, global attention on the Arctic's geo-strategic importance has increased as well, elevating the region so that it sits among the most important arenas of international politics of the past twenty years (Hoel & Heininen, 2016, p. 321).

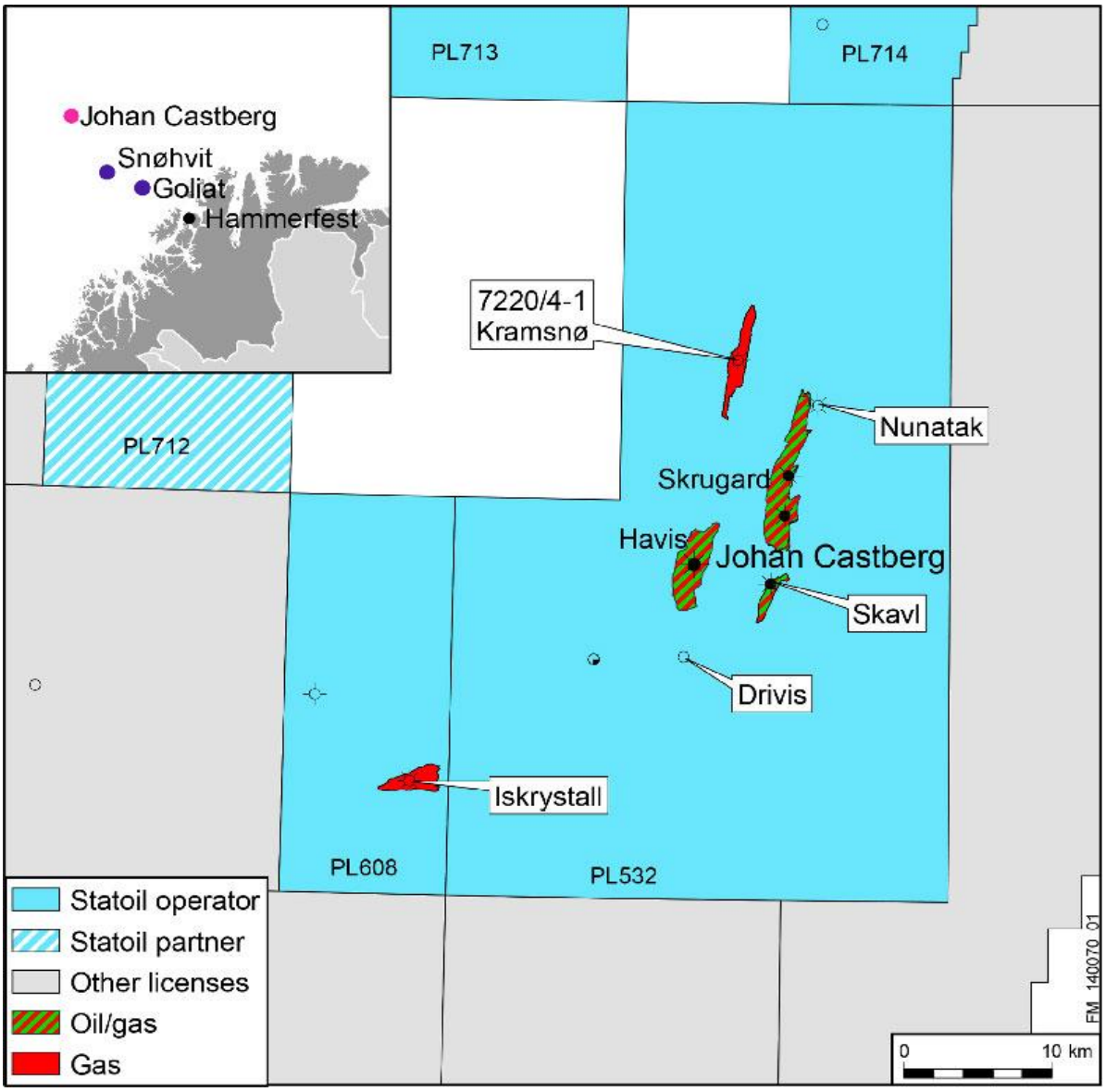
Norway and Russia currently control the extraction of oil and gas in the Barents Region. In 1980, Norway started exploration of Tromsøflaket, an offshore bank located in the south western border of the Barents Sea. By the beginning of the new millennium, there had been only two further major developments. In 1984, the oil and gas company Statoil discovered the Snøhvit gas field, and in 2000 the oil company Agip discovered the Goliat oil field. In 2011, Statoil discovered the Johan Castberg (formerly Skrugard), another major oil field. Since that discovery, hopes about the resource potential of the region have heightened. In 2011, the estimated reserves in the fields discovered was 193 million tons of oil equivalent (mtoe), of which 70% was natural gas. With just 75 exploration wells drilled by 2011, activity in the Norwegian Barents Sea has not been intense, leading to expectations of undiscovered resources of up to 735 mtoe (Austvik & Moe, 2016, p. 115).

Map 7: The Tromsøflaket in Northern Norway between the cities of Tromsø and Hammerfest.

(Rostad, 2015)

Until recently, Norwegian gas production in the Barents Sea has come only from the Snøhvit field, located offshore, 140km north west of Hammerfest, which started to operate in 2007 as the first large LNG project in Europe. The project was interrupted a few times because of market uncertainties and went ahead only after 2000 on the basis of positive predictions about the US gas market and tax adjustments. Even then, the launch was difficult because of commercial uncertainty, over-running costs and initial serious technical problems. The recoverable reserves of the field are 173 billion cubic metres (BCM) of natural gas, and 22 BCM of gas condensate. Extraction of the gas requires subsea installations at water depths of about 300 metres. The gas is transferred to shore through pipelines to a liquefaction plant on Melkøya Island. The field is estimated to produce 6 BCM annually, of which 2.6 BCM have been contracted by Statoil for the US market, 1.6 BCM for Spain, and 1.7 BCM for other partner companies, such as Total and GDF Suez (Austvik & Moe, 2016, p. 115). The Goliat oil field was supposed to start production in 2014 and connect with the Melkøya stream. Due to over-running costs and unfavourable market status, production here started only in 2017. The field is operated by the Italian energy company ENI and is estimated to have 23.2 million tons of recoverable oil.

Map 8: Oil and gas fields in the East Barents Sea. Details of the formation of the Johan Castberg oil field.



(Berglund, 2013)

The Soviet Union started seismic surveys in the Barents Sea in 1970s. In the late 1980s, gas fields in the 'super-giant' category[13] were discovered in the north-western part of the Russian Barents Sea, including the Shtokman field.

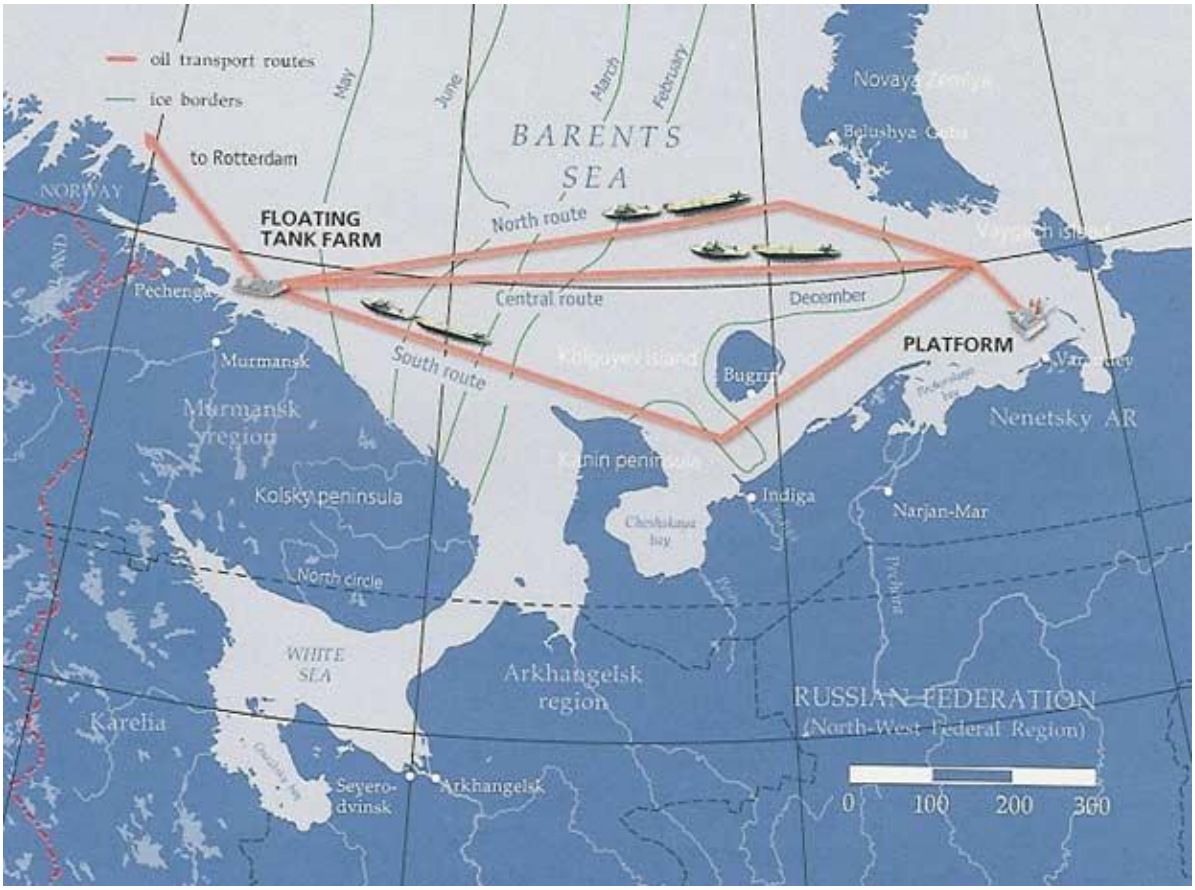
Map 9: The Shtokman field and plans of distribution.

(Gazprom, 2012)

In the Pechora Sea, located at the south-eastern border of the Barents Sea, the Prirazlomnoye oil field was discovered in 1989. For financial and organisational reasons, exploration activity declined dramatically in the 1990s, and production at the Prirazlomnoye field, the first offshore oil rig in the Arctic, started in late 2013 (Gazprom, 2018d).

[13] The super-giants are the largest category of natural gas fields, which contain more than 850 bcm (30 tcf) of gas.

Map 10: Oil transport at the Barents Sea.



Ice-going ships will transport the oil from the Prirazlomnoye platform to a floating terminal in the open sea off Murmansk through the frozen waters of the Barents Sea. From there, it can be exported globally via super-tankers (Offshore Technology, 2017).

Image 1: The Prirazlomnoye oil field (Staalesen A. , 2018).

In the Russian side of the Barents Sea, the number of exploration wells does not exceed that on the Norwegian side, but the discovery rate has been much higher. The Russian part of

the Barents Sea holds an estimated 3,700 mtoe of recoverable resources, more than the total reserves of the entire Norwegian continental shelf. Even if the Russian estimates are unreliable, the resource potential is very significant (Austvik & Moe, 2016, p. 116).

There was no significant fossil fuel production in the Russian Barents Sea until late 2013; the only exception was test production of oil near Kolguyev Island in 1982. The two major Russian projects in the Barents Sea are the Prirazlomnoye oil field and the Shtokman gas and condensate field. The former is located 57 km offshore from Varandey in the Pechora Sea and the depth is just 20 metres. The recoverable reserves have been estimated at 46.4 million tons, supporting an annual output of 6 million tons. The platform is a huge steel box that contains production and storage facilities while protecting the installations from the severe ice in the area. Construction began in 1995 and progressed periodically until it was placed like an island on the shallow ocean floor in early 2012. After some initial problems were tackled, Gazprom Neft Shelf, a wholly owned subsidiary of Gazprom Neft, started production in December 2013 (Austvik & Moe, 2016, p. 116-17), (Gazprom, 2018d). The Shtokman field is one of the largest offshore gas fields in the world, with reserves of 3,800 BCM, and is located 650 km north east of Murmansk city and 540 km from shore at a sea depth of 320-340 metres. After many years of negotiations, Shtokman Development AG (SDAG) was established at the beginning of 2008, with Gazprom (51%), Total (25%) and Statoil (24%) as partners. SDAG would be responsible for only the first of three stages, each of which would produce up to 23.7 BCM per year. The initial plan was to focus on LNG and later produce LNG and gas in equal quantities, piped to the Baltics and to Germany via the Nord Stream. The final investment agreements were suspended several times and the 'shale gas revolution' in the USA was the final straw for the project because most of the gas was intended for the US market and because of uncertainty about global gas prices. In 2012, the project was abandoned. In the following years, new solutions, such as reducing costs and bringing new partners into the business, were developed to make the project feasible (Austvik & Moe, 2016, p. 117-118), but the Shtokman field currently remains inactive.

Russia also has onshore oil and gas developments. West of the Ural Mountains, the Timan-Pechora petroleum basin lies in the Komi Republic and the Nenets Autonomous Okrug. Developments in Komi started in the 1960s and peaked in the early 1980s, producing

approximately 21 million tons of oil and 20 BCM of natural gas per year at this point. In 2010, production was 13 million tons of oil and just 3 BCM of natural gas. Exploration and exploitation in Nenets began in the 1990s with many international companies involved, including Conono, Total and Norsk Hydro. Production reached approximately 18 million tons of oil per year after 2009. Oil from the northern-most fields are transferred via pipelines to a sea terminal in the Pechora Sea 22 km off the coast of Varandey and then transferred via small tankers to a reloading terminal in Kola Bay with a capacity of 12 mtoe per year. From here, it is transferred to super tankers for further shipping to the global markets. Oil from the southern fields reaches the main Russian pipeline through Komi. The Nenets region has a high resource potential for oil, but natural gas production accommodates only the local needs owing to a lack of pipeline connections (Austvik & Moe, 2016, p. 117-118).

In the 1970s, a dispute emerged between Norway and the Soviet Union in relation to an area of 175,000 km^2 in the Barents Sea and the Arctic Ocean. The law of the sea grants coastal states sovereignty over their continental shelves to a minimum of 200 nautical miles from the coastline. The disputed area falls outside of these limitations. The delimitation agreement, which came into effect in July 2011, divided the disputed area in half, and any transboundary fields should be developed mutually by the two countries. In the western part of the previously disputed area, Norway started seismic surveys immediately, whereas the eastern part was licensed to the Russian state-controlled company Rosneft and exploration started only in 2012. Establishment of the delimitation agreement generated new opportunities for Norwegian–Russian co-operation on oil and gas production, shipping and environmental issues.

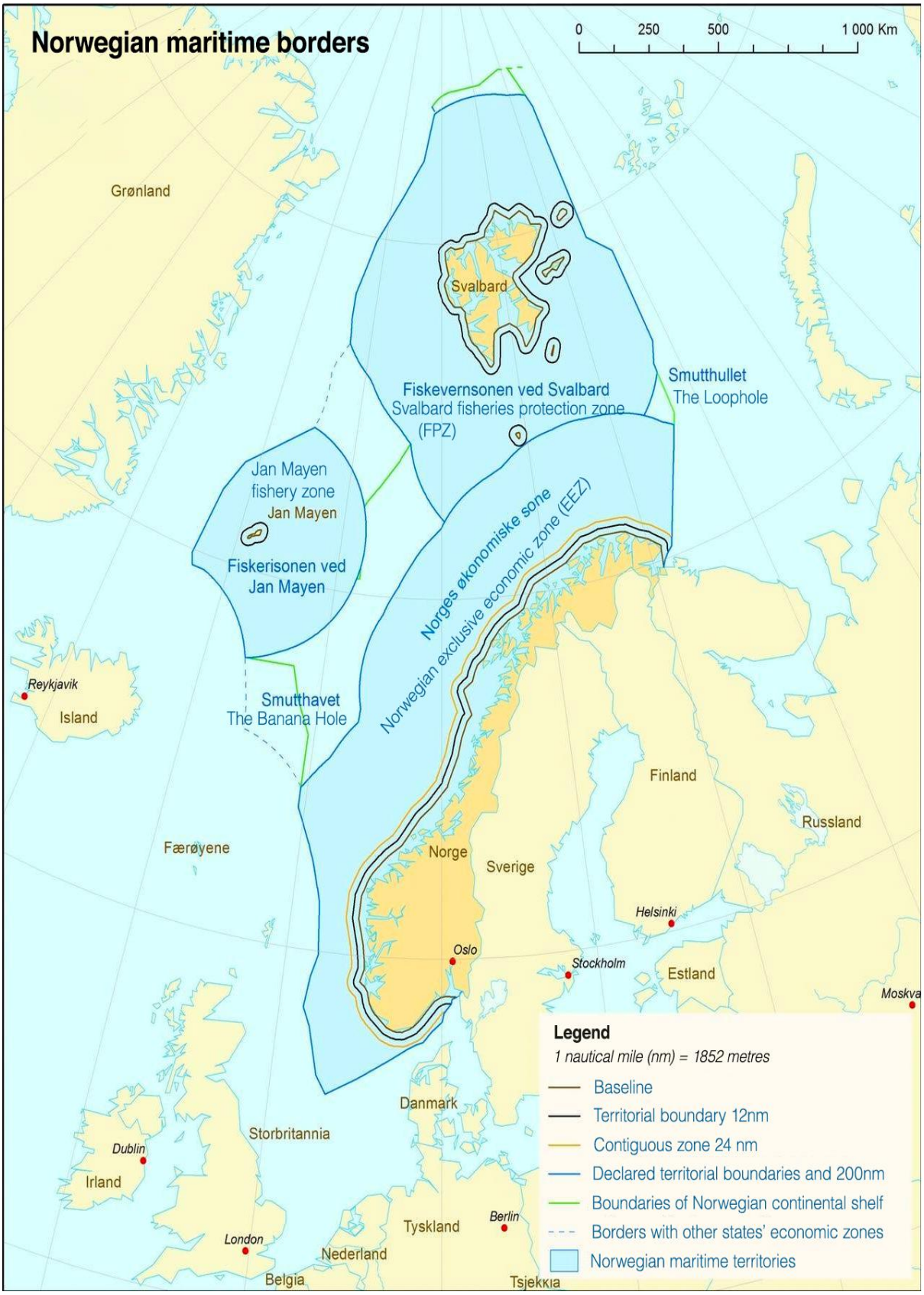
Nonetheless, jurisdictional issues related to the maritime zones around Svalbard Archipelago do not yet fall under a clear international agreement. In the 1920s, the Svalbard Treaty granted full and absolute sovereignty of the islands to Norway. An area of sovereignty was delimited by co-ordinates and is usually referred to as the 'Svalbard box'. The Treaty obliges Norway to not discriminate against the other signatory parties[14] with

[14] A total of 43 countries are registered as parties to the Svalbard treaty: Afghanistan, Albania, Argentina, Australia, Belgium, Bulgaria, Canada, Chile, Denmark, the Dominican Republic, Egypt, Estonia, Finland, France, Greece, India, Iceland, Italy, Japan, China, Latvia, Lithuania, Monaco, the Netherlands, New Zealand, North

respect to almost all economic activities or to impose higher taxes than necessary for the administration of the islands. However, an ongoing dispute relates to the sea areas beyond the territorial waters of Svalbard and the ocean floor. Until now it is uncertain whether there are promising areas for fossil fuel activities there or not. Norway argues that the Svalbard Treaty does not apply to the extended continental shelf of the islands, and that these maritime zones are under the jurisdiction of Norway, based on the modern law of the sea. Norway sees the continental shelf around Svalbard as a continuation of the continental shelf of its mainland, excluding the 20km strip of territorial waters surrounding the islands. On the contrary, few signatories to the Svalbard Treaty argue that these maritime zones fall under the same Norwegian jurisdiction – the Svalbard Treaty – as the islands. In any case, the decision to open this continental shelf to commercial activities belongs to Norway and this decision has not been taken to date (Austvik & Moe, 2016, p. 118-119).

Korea, Norway, Poland, Portugal, Romania, Russia, Saudi Arabia, Spain, the UK, Switzerland, Sweden, South Africa, South Korea, Czech Republic, Germany, Hungary, the USA, Venezuela, Austria.

Map 11: The Maritime Borders of Norway



(Norway's Mapping Authority / Kartverket, 2018)

From the 1970s, many large and small companies, both international and Norwegian, have been engaged in extraction of oil and gas on Norway's continental shelf, and Statoil has been the most important. The same is true of Norwegian exploration and exploitation of fossil fuels in the Barents Sea. In Russia, Gazprom, the biggest producer of gas globally, controls Russian gas production, holding almost 85% of the output, and also controls the main pipelines as the only Russian gas exporter. In addition, it holds by law the monopoly on any offshore gas activities. Similarly, Rosneft holds a strong monopoly for offshore oil production, so that the company holds an increasingly dominant position. Onshore in the Barents Region, the two main active companies are Rosneft and Lucoil, another major Russian actor. All[15] crude oil pipelines belong to the state monopoly Transneft and oil product pipelines are owned and operated by its subsidiary, Transnefteprodukt. Until recently, the presence of international companies within the Russian fossil fuel sector was limited. The Shtokman project was a good start in that it involved Gazprom, Total and Statoil, but was put on hold in 2012. Since then, Gazprom has tried to expand its partnerships with ExxonMobil and the Italian company ENI to work on developments in the Northern part of the Kara Sea[16] and in the southern part of the formerly disputed area of the Barents Sea respectively. Deals between Rosneft and foreign companies has followed a similar pattern to those of Gazprom. They consist of joint ventures for exploration and production from the assigned blocks. International companies together hold a third of the shares in each joint venture and Rosneft holds two thirds. The international companies also cover all the costs of the geological seismic stage for a certain number of exploration wells and they also compensate Rosneft for what they refer to as 'historical costs' (the initial prospecting) and pay a third of the price for acquiring the exploration and exploitation licences. This system is similar to the Norwegian 'carrying interest' system from 1970s, in which minority international shareholders were expected to cover all exploration costs in a field while Statoil held the majority share (Austvik & Moe, 2016, p. 118-119).

The disputes between the Ukraine and Russia over natural gas transport which peaked in 2009, sharpened by the Russian perception that their country is politically and economically trapped. Russia wants predictable terms of trade and transit within the CIS (Commonwealth

[15] Except the Caspian Pipeline Consortium.
[16] Statoil also joined this exploration later.

of Independent States) and also requires alternative -more than one option for- transportation routes. Apart from some LNG projects, natural gas from the Barents Region has to be transported via pipelines. The operational Nord Stream gas pipeline offers an alternative route for transporting gas from Siberia to Germany. This line also has the potential to transfer gas from the Barents Region with the installation of the relevant infrastructure between the Kola Peninsula and Vyborg, near St. Petersburg. Another, less realistic option could be to connect the gas fields of the Barents Region with the Norwegian pipeline system, but for this to be achieved, a long extension of the current pipelines is needed as they currently only reach central Norway.

The potential benefits of expanding oil transportation in the Barents Region is also significant. Russian oil exports are limited to pipelines crossing Lithuania, Poland, Ukraine and Slovakia and to the existing rail network. However, sea-based oil transport exists in the Black, Baltic and the Barents Seas. In the Komi Republic, in the towns of Ukhta and Sosnogorsk, oil and gas processing plants, respectively, have been established and a shipping terminal for crude oil is in operation in Varandey in Nenets. In 2017, almost 2.5 million barrels of oil per day were exported from the Russian Barents Region, including the significant ports of Murmanst, Vitino and Arkhangelsk. Concerning the transport of natural gas, from three proposed LNG plants on the Russian side, only the Yamal LNG went forward while those planned in Teriberka[17] and Nenets were postponed owing to uncertainties in the LNG market. Nevertheless, an increase in the number of vessels navigating the ice-free Norwegian and Russian waters around Kola and Finnmark is expected (Austvik & Moe, 2016, p. 118-119).

Environmental issues in the Barents Region cannot be ignored. Exploration and exploitation of fossil fuels, including offshore and onshore terminals and shipping routes, are very important to the economic and environmental challenges that both Russia and Norway face. The cold climate and waters of the Barents Region are a fragile environment in terms of wildlife, biodiversity, fisheries and nature. The most severe environmental threat today is shipping, as the increased tanker traffic makes the risk of an oil spill high. Nuclear accidents

[17] For processing gas from the also postponed Shtokman gas field.

and nuclear waste handling are also high on the list of environmental threats. Norway and Russia need to improve their co-operation to develop an early warning and notification system. Russia had overlooked environmental problems in the past, but an energy policy for the period up to 2030 was published in 2009. This policy includes aspects of energy efficiency and limiting the impact of fuel and energy on the environment and climate (Austvik & Moe, 2016, p. 119-120).

The Norwegian and Russian governments are quite involved in the fossil fuel exploitation industries of their countries, as they acquire significant economic and political benefits from them. Yet the policies developed in the two countries are very different as a result of differences in political structure, ideological adherence, economic systems, and cultural and geographical features. New policies have been formulated by both countries, as political systems are changing, and international affairs and trade relations are globalised and fluid. Both Russia, which experienced dramatic changes in order to become a market economy, and Norway moved from a traditional social democratic system to a more liberal political structure. Knowledge, good relations, and confidence-building are crucial factors for co-operation between Norway and Russia in the Barents Region, as both countries have common interests in modern infrastructure and industrial technology.

Oil and gas developments in the Barents Sea require higher market prices than those in the North Sea and onshore in Russia. For this reason, international co-operation might be necessary for some projects. Crucial aspects for future developments are new sub-sea technologies and organisational concepts, significant amounts of capital, enhanced transport, political will, and a predictable legal and political framework. Environmental protection is also a critical factor that cannot be neglected (Austvik & Moe, 2016, s. 120).

5.5 Reflections

As this research incorporates human geography and international relations analysis, this history chapter greatly enhances our understanding of the geographical area under examination, the Barents Region. It becomes clear how the existing levels of co-operation materialised after the heated periods of WWII and the Cold War in the European continent.

The differences between the regimes of Norway and Russia before and after WWII and the Cold War contributed greatly towards the different levels of development among their Barents Regions. In addition, the need for environmental protection became apparent as the exploitation of fossil fuels intensified and is turning into an adverse development for the fishing industry, the second most profitable industry of the region.

At an international level, Barents Region an unparalleled degree of co-operation towards environmental protection, sustainable development, search and rescue operations and safety on marine shipping has been observed. This co-operation has not been substantially affected by external (non-Arctic) geopolitical tensions that have occurred among Arctic and European actors. The huge economic interests that are at stake, in combination with the harsh and fragile environment, do not leave many margins for political friction and defective co-operation.

Having depicted the most significant historical aspects of the Barents Region throughout the past centuries, it is clear why the Barents Region is so unique in comparison with other European regions. Moreover, it helps me to argue for or against the planned developments of the region, which will be outlined in the following chapters. Ultimately, this chapter contributes greatly to an understanding of the present situation in the Barents Region and why it is so peaceful and co-operative and almost unaffected by other political tension among the actors involved in this specific geographical area. Last but not least, explains the interests of the EU to keep this region peaceful and sustainable.

Chapter 6

Methodology

6.1 Introduction

This chapter is organised into four major sections. In the first, I present my major research questions, the methods I have used to analyse them and why I chose those particular methods. The second section includes the selection of interviewees, the interview structure, and the justification of my interview invitations. The third section deals with the methods and ethics of the interviews, covering all the ethics considered and the practices undertaken before, during and after the interviews. The fourth section incorporates the qualitative analysis of coding and sorting, details the methods used for the study, and includes acknowledgement of the limitations and biases.

6.2 Methodological framework

The two sections below include analysis and justification of the methods employed. First, there is a broad overview of the methods, followed by the specifics of how I have used them for my research. Qualitative and archival research in human geography, the international relations theory of critical securities studies, and discourse analysis of policy and media reports have been used for data triangulation and validation with the aim of generating strong data and robust results.

6.2.1 Concepts of methodology in human geography

Interpretive research gives priority to qualitative rather than quantitative research methods of analysis (Dudovskiy, 2018). The interpretivist approach is based on collection of data via methods such as interviews and observations, and secondary data –data that has been collected by somebody else previously– are also commonly used in interpretive research. Interpretive researchers assume that reality can be accessed (given or socially constructed) only through social constructions such as language, consciousness, shared meanings and

instruments (Myers, 2013), (Kaplan & Maxwell, 2005). The basis of the interpretivist philosophy was the critique of positivism in social sciences, to which human geography belongs. Interpretivism is "*associated with the philosophical position of idealism, and is used to group together diverse approaches, including social constructivism, phenomenology and hermeneutics; approaches that reject the objectivist view that meaning resides within the world independently of consciousness*" (Collins H. , 2010, p. 38). Following from the above, a crucial aspect of the interpretivist approach is that the researcher, as a social actor, acknowledges and welcomes the differences among people (Saunders, Lewis, & Thornhill, 2015). In addition, interpretive researchers tend to focus on meaning, and it is common for them to use multiple methods to reflect different aspects of a subject (Dudovskiy, 2018).

In interpretivism, reality is assumed to be socially constructed and multiple realities are assumed to be possible. The goal of interpretive research is to understand an issue rather than find an explanation, and the ability to make predictions on the basis of the findings are limited. At the same time, the focus is on what is specific and unique to find meanings and generate relative knowledge about time, context, culture and value. The relationship between the researcher and the subject being examined is interactive and co-operative, and the researcher seeks information on what some people think and do, what kind of problems they face and how they deal with them.

The main disadvantages of interpretivism are the subjective nature of the research method and the possibility of bias from the researcher. Moreover, as the primary data generated are closely connected with personal viewpoints and values, they cannot be generalised. These limitations result in, to a certain degree, impaired reliability and representativeness of data. Nevertheless, interpretivism enables qualitative research areas, such as cultural differences in states, societies, ethnicities, actors of interest etc., to be studied in depth. In addition, primary data generated through interpretive studies are associated with a high level of validity because these data tend to be trustworthy and honest (Dudovskiy, 2018).

Interpretive researchers do not predefine dependent and independent variables but focus on the intricacy of human sense-making as the situation arise (Myers, 2013). As qualitative research is a form of interpretive phenomenological analysis –as are other philosophical

traditions and approaches, such as ethnography, discourse analysis, phenomenology/ethnomethodology, grounded theory, conversation and protocol analysis, symbolic interactionism, hermeneutics, ethogenics, narrative analysis and constructionism – it is highly relevant to people's understanding of and communication within our social world (Bryman A. , 1988), (Denzin & Lincoln, 2000).

So, qualitative researchers are aware of the living worlds and are interested in voices of individuals and groups (Atkinson, Coffey, Delamont, Loftland, & Lofland L, 2001). Through these sources, which express themselves freely to demonstrate their own thoughts and experiences, qualitative researchers have come to the agreement that knowledge is partial and contextual (Haraway, 1991). As individuals have a significant role in the construction of social reality (Hodkinson, 2008), their reports or narratives should be respectfully considered as original, accurate and a credible source of knowledge.

Nevertheless, there is no single, accepted way of conducting qualitative research. Every researcher is influenced by multiple factors, such as their beliefs about nature and the social world (ontology), the nature of knowledge and how it can be acquired (epistemology), the purposes and goals of the research, the characteristics of research participants, the audience for the research, the funders, and the positions and environments of the researchers themselves (Ritchie, Lewis, Nicholls, & Ormston, 2013). The proportion and influence of these factors differ in every researcher, leading to diverse paths for qualitative research. As Denzin and Lincoln argued, qualitative research, with all the diversions and approaches embodied, could be defined as

> "*...a set of interpretive, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field-notes, interviews, conversations, photographs, recordings and memos to self … qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them*" (Denzin & Lincoln, 2011, p. 3).

Qualitative analysis is an extensive method of analysis that incorporates various subcategories, with each subcategory favouring different analysis approaches to different types of data (Atkinson P. , 2005). "*Qualitative data are data that reveal the 'qualities' of certain phenomena, events and aspects of the world under study, chiefly through the medium of verbal descriptions which try to convey in words what are the characteristics of those data*"… "*Qualitative data are more commonly reckoned to be more subjective – leaving researchers prone to injecting too much of their own 'biases' in the dealings with data"* (Cloke, et al., 2004, p. 17).

6.2.2 Applying methodology in my research

My major research methodology for this project is based on interviews with experts, discourse analysis and the use of critical security theory of international relations. In this section, I discuss the reasons for using these methods and their advantages and limitations.

An interview is a research method used mostly in ethnographic and interpretive research (Lester , 1999), in which the researcher/interviewer brings forward questions and guides the conversation with the interviewee (Teddie & Tashakkori, 2009). In social science, interviews are a powerful method for collection of data, as they employ one-to-one interaction and "*…people's knowledge, views, understandings, interpretations, experiences and interactions are meaningful properties of the social reality*" (Mason J. , 1996, p. 39). The face-to-face interaction between researcher and interviewee provides an opportunity for the researcher to ask for more detailed explanations of the research topic if an answer is not clear (Finkbeiner, 2016, p. 142).

Semi-structured interviews are "*usually organized around an aide memoire or interview guide*" (Mason J. , 2007, p. 1020). The structure is regularly adjusted during the interview according to topics and themes. (Finkbeiner, 2016, p. 144) The flexible nature of semi-structured interviews means the interviewee shapes the interview according to his own understandings, as "unexpected themes can emerge" (Mason J. , 2007, p. 1020). Semi-structured interviewing forms reflect an ontological position "concerned with people's knowledge, understandings, interpretations, experiences, and interactions" (Mason J. ,

2007, p. 1020). The core characteristic of this interview approach is "*the belief that knowledge is situated and contextual, and that, therefore, the role of the interview is to ensure that relevant contexts are brought into focus so that situated knowledge can be produced*" (Mason J. , 2002), (Mason J. , 2007, p. 1020). As semi-structured interviews are "*open, flexible, and interactive*", they are designed to generate the interviewee's understanding, their "*own perspectives, perceptions, and experiences*" in conjunction with their opinions and observations (Finkbeiner, 2016, p. 142).

I chose this particular technique because the semi-structured interview is a respected and beneficial approach for acquiring interpretive data (Gururajan & Fink, 2010), (Zeiller & Schauer, 2011), (Sedera & Sharmistha, 2013). There are three major benefits of their use. Firstly, questions can be prepared ahead of time, enabling the interviewer to be prepared. Secondly, semi-structured interviews enable participants to express their views in their own terms. Thirdly, semi-structured interviews can provide trustworthy, comparable qualitative data (Cohen & Crabtree, 2006). However, as the interviewer, I have been cautious and examined to what degree the interviewees expressed their own voices or someone else's, such as a country's official policy, an institution's line or the opinion of a more senior official or researcher. Moreover, I have checked sources, such as new policy documents and reliable media, to assess the information they provided and determine the facts, giving great attention to the interpretation of their opinion and views.

The major advantage of open-ended interviews for my work was that it not only achieved the original interview objective, but the explanations and information provided by the interviewees led my research in new directions, letting me see perspectives and opportunities I had not considered before. Participants also had the opportunity to make their meaning clearer, with their motivations and thoughts often revealed (Monroe, 2002).

Semi-structured interviews have been criticised because they are not standardised, so cannot be compared, and some people consider them to be invalid "*because [the interviews use] a logic where comparison is based on the fullness of understanding of each case, rather than standardization of the data across cases*" (Mason J. , 2007, p. 1021). However, such interviews are referred to as interviews with purpose (Webb & Webb, 1975), and the aim is

for discussions formulated through structured, semi-structured or unstructured setups to "*give an authentic insight into people's experiences*" (Silverman, 1993, p. 91). Interviewers are involved in the construction of meanings with their interviewees in a framework of intellectual dignity. This kind of inter-subjectivity is of great importance, and the data produced are essentially collaborative (Alaasutari, 1995), (Cloke, et al., 2004). "*The strengths of using interviews lie in the very acknowledgement of inter-subjectivity of the who's, how's, where's and what's of many aspects of human geography research*" (Cloke, et al., 2004).

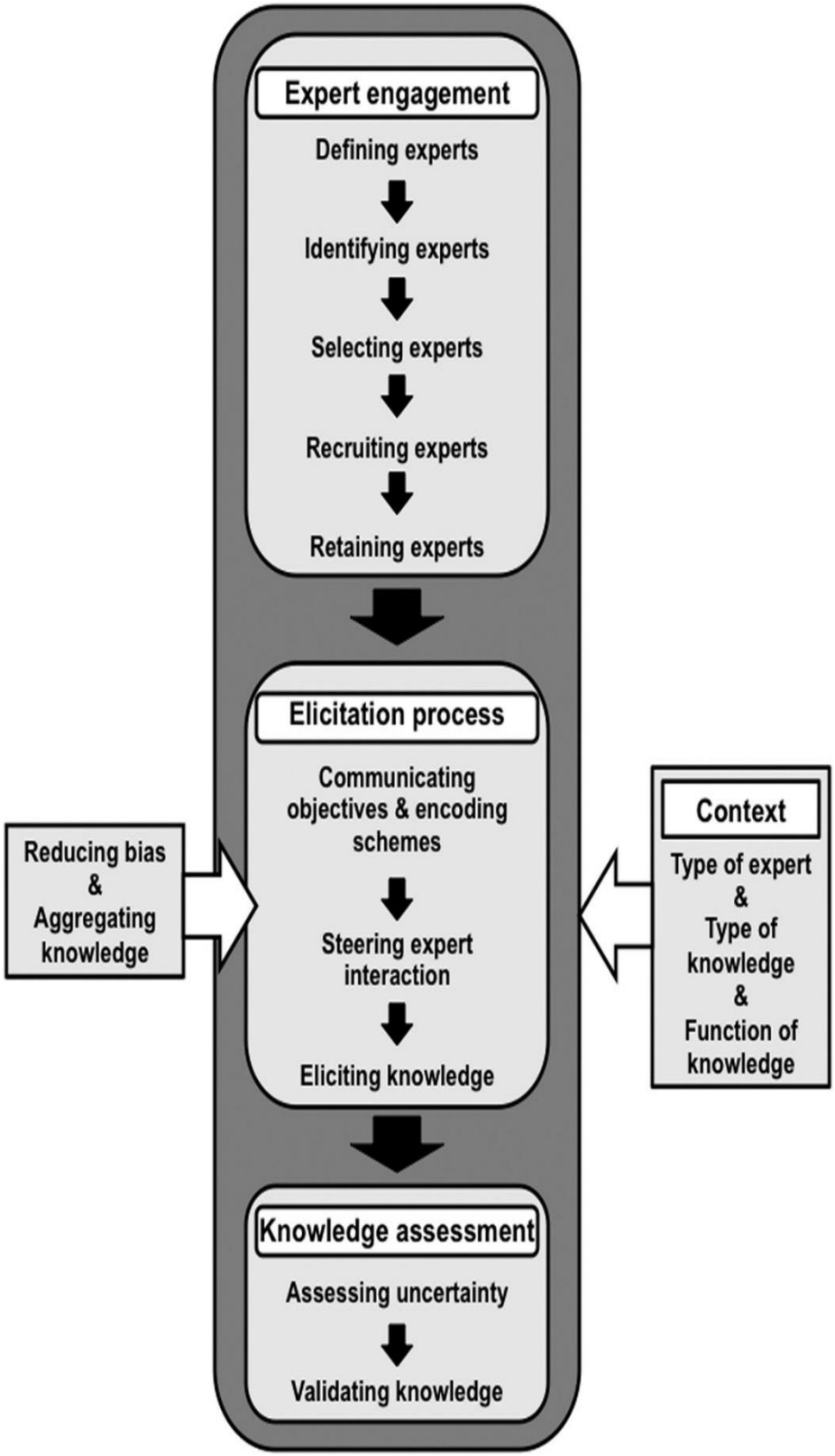
Interviewing experts provided me with fast access to new or unknown fields and a quick way to obtain specific information. What is more, experts have extensive insight into aggregated and/or specific knowledge and information that is difficult to explore with other methods. Additionally, as it was the case in my research, experts often have considerable networks and can lead you to additional experts for more interviews. Finally, the majority of experts are motivated and are often willing to co-operate and exchange information (Van Audenhove, 2007). One possible disadvantage of interviewing experts is difficulty with guiding the interview in the desired direction, as the expert leads the conversation towards his or her field of expertise. Other crucial issues that I had to pay attention at were that experts can focus on the problems of their own data and that interviewees can create bias by telling the interviewer what they want to hear rather than the reality. Finally, I am aware that the experts I interviewed are not the only experts on the Arctic or, more specifically, on the Barents Sea – other experts could include officials from indigenous people organisations or NGOs.

Deciding who holds the status of 'expert' is always a social and methodical construction (Deeke, 1995, p. 7), and can be determined exclusively by the relationship between the subject of research and the respective interests of potential experts (Meuser & Nagel, 1997). It has also been argued that experts are "*agents bearing specific functions within an organisational or institutional context," who "(re)present solutions to problems and decision-making-processes*" (Meuser & Nagel, 2005, p. 74), (Abels & Behrens, 2009). Also, they could be "*highly educated individuals, who are very conscious of their status and accustomed to present themselves favourably, to handle inquisitive situations and to elaborate on complex contexts*" (Abels & Behrens, 2009, p. 140). In my qualitative research, the majority of the

experts interviewed are not connected with power and authority, as experts often are, but are highly educated with professional knowledge in my specific field, as Abels and Behrens argued above.

The accuracy and validity of the knowledge of the experts interviewed was not just assumed – the judgment of absolute or relative validity of knowledge was an important consideration during my research. For that reason, comparison and triangulation between experts' data, policy papers and media reports took place during data production. Most weaknesses inherent to expert knowledge are with its usage, which can be diminished by prudent and explicit steps: i) choice of experts, ii) eliciting of their knowledge, iii) explicit assessment of uncertainties, and iv) validation of results (Drescher, et al., 2013, p. 20).

Figure 5: Using Expert's Knowledge



In Figure 5. Drescher et al. depict the steps of using knowledge from experts. The main aspects are engagement of experts, elicitation of the expert's knowledge, and knowledge assessment, steps that I used in my research. Reduction of bias and aggregation of knowledge from multiple experts took place through the elicitation process (Drescher, et al., 2013, p. 10).

Bogner and Menz have produced the following comprehensive definition of the expert:

> "*An expert has technical, process and interpretative knowledge that refers to a specific field of action, by virtue of the fact that the expert acts in a relevant way (for example, in a particular organisational field or the expert's own professional area). In this respect, expert knowledge consists not only of systematised, reflexively accessible knowledge relating to a specialised subject or field, but also has to a considerable extent the character of practical or action knowledge, which incorporates a range of quite disparate maxims for action, individual rules of decision, collective orientations, and patterns of social interpretation. An expert's knowledge, his/her action orientations etc., also (and this is decisive) point to the fact that s/he may become hegemonic in terms of practice in his/her field of action (for example, in a certain organisational/functional context). In other words, the possibility exists that the expert may be able to get his/her orientations enforced (at least in part). As the expert's knowledge has an effect on practice, it structures the conditions of action of other actors in the expert's field in a relevant way*" (Bogner & Menz, 2009, pp. 54-55).

Based on the above, face-to-face semi-structured interviews with experts in the field were considered best suited for my research questions. This approach enabled me to gather the experiences and insights of experts regarding the ongoing multidisciplinary situation in the Barents Region, considering the energy security of the EU, energy exploitation and environmental and human security. When the time or the distance were prohibitive for face-to-face interviews, interviews were conducted through Skype.

Table 1: Linking research questions and methods

Research questions	Data sources and methods	Justification
1.To what extent do the energy reserves of the Barents Region create inter-relations between Norway, Russia and the EU?	- Interviews - Discourse Analysis - Media reporting	- Interviews with experts provide thoughts and beliefs that cannot be told in public or for which there has not yet been an opportunity to be told publicly. - In-depth analysis of policy documents will outline a clear picture of the ongoing situation - Media is the most common source of information to the public. Comparison of the views of experts with media reports the actual policies should reveal the complexity of relations among the EU, Norway and Russia
2. In what ways can critical security studies be applied to the energy security of the EU in relation to Norway and Russia?	- Theory analysis – Copenhagen and Welsh schools of thought	- The critical security studies have a great and expanding literature, which will help me to comprehend the contemporary energy issues
3. In what ways can contemporary critical security studies be used to support the development of international policies that can support sustainable development in the Barents Region?	- All methods used in the study	- Interviews with experts provide valuable insights for the area under study. - In-depth analysis of documents and reports will outline a clear picture of the relations among humans, environment and economic activities - Media is the most common source of information to the public. Comparison of the views of experts with media reports should create a clear picture of what is happening and what should happen.

(Mason J. , 2002, pp. 28-29)

Discourse analysis has also been chosen because it can identify structures and strategies applied to texts and speeches. Additionally, discourse analysis can reveal the links between discourse and dominance. Moreover, the major fields in which critical discourse is encountered are the misuse of power, unlawfulness, democratic values, and meritocracy and egalitarianism from the wielders of power.

Through my analysis, I also aim to point out as many voices, opinions, perspectives and representations that have been censored, unheard or ignored in formal documents or policies as possible. These are the values of methods inherent with discourse analysis (Van Dijk, 2005, pp. 300-304). As Meriel and Thomas argued:

> "*Central to discourse analysis is the understanding that discourse is an integral aspect of power and control. Power is held by both institutions and individuals in contemporary society and any challenge to the status quo challenges those who hold power. Thus, a commitment to 'social equality, fairness and justice' is itself a challenge to those who are responsible for maintaining the inequalities, unfairness and injustice in contemporary society and must be of major concern to those who challenge the status quo*" (Meriel & Thomas, 2007, p. 4)

As part of my analysis, I needed to distinguish rhetoric from reality, identify how they co-produced, and depict the connection between rhetoric and reality. I decided to use discourse analysis because it "*sees language as one element of social practice*" (Fairclough, 2000, p. 143). This kind of analysis relates to the interactions between social change and discourse and to social issues of power and domination. In other words, "*how the combination of discourses, genres, and styles, which make up the language elements of a social practice, changes over time*" (Fairclough, 2000, p. 159). To be more specific, the object of my research is to analyse the energy security of the EU and the role of the Barents Region in that, and the problems are i) the lack of a common European strategy ii) the political strife of the EU with Russia and iii) the obstacles created by the different interests of the member states. Discourse analysis of state documents, EU policy papers, NGO

reports, company statements and media reports enabled me to recognise power and interests articulated in these discourses that are relevant to my research questions.

6.3 Interviewee recruitment and interview design

For a research project with a very specific scope "…*the participants are selected who best can inform the research questions and enhance understanding of the phenomenon under study*." (Creswell, 2009), (Kuper, Lingard, & Levinson, 2008). As Sargeant adds, "…*one of the most important tasks in the study design phase is to identify appropriate participants. Decisions regarding selection are based on the research questions, theoretical perspectives, and evidence informing the study*." (Sargeant, 2012, p. 1). The geographical area and the geopolitical, human and environmental issues under the scope of this research were very narrow and specific. Consequently, I needed to search thoroughly for specialised academics, specific officials in different governmental or intergovernmental structures and particular individuals with outstanding knowledge of the region's affairs. Highly specialised individuals, with exceptional knowledge in European and Arctic affairs, from all around the world were selected for the qualitative research interviews. The information I was looking for could be obtained from governmental officials from the EU, Norway and Russia. Academics in human geography, politics, geopolitics and energy were also an invaluable source of information. Research organisations and think tanks dedicated to Arctic research and human geography contributed the most to my research. Lastly, private companies (such as petroleum and gas companies) could provide plenty of information on the area of my interest, however it could be commercially sensitive, and they did not reply to my invitations for interviews.

Accessibility was the main difficulty throughout the qualitative research project, from the selection and contacting of participants to the final interview. I received positive responses from a few officials, many academics and some ministries, although these responses differed in their extent. For example, the response of the Norwegian ministry was much more comprehensive than that of the UK ministry. I had no responses from the private companies and most research organisations or think tanks contacted.

Most of the academics contacted, with only a few exceptions, accepted my interview invitation, were willing to give relevant information and were informative and critical on several topics. Similarly, Norwegian officials, academics and researchers were very willing to participate and answer my questions. Only two EU officials responded positively. Though these officials seemed reluctant to comment on EU policies and to speak about geopolitics, they provided in-depth information about the current energy picture of the EU and the different interests among states. Finally, Russian officials and private companies were neither accessible nor willing to give information, but I was able to interview Russian academics, experts on Russian affairs and experts on the petroleum industry with great knowledge of Gazprom, Statoil and fossil fuel economics at the Barents Sea.

For my research, I used semi-structured interviews with open-ended questions, and I invited Arctic experts as interviewees for the project. Experts were mainly individuals or representatives of their groups, who possess knowledge and experience of the Arctic and Barents, energy security and energy transitions, EU policies and geopolitics. As the research questions of this project are multidisciplinary, the desired information could not be acquired from only a few experts. My target was to include experts from a wide range of nationalities, institutions, academic experts and researchers, specialised in the desired area of study.

I aimed for fifteen interviews, but finally conduct twenty-one with the help of the 'snowball technique', in which individuals, including previously identified participants, recommend additional participants. The participants included several academic experts and senior researchers from around the world, officials from the EU department of energy, the UK department of Business, Energy & Industrial Strategy, and the Norwegian Ministry of Petroleum and Energy.

The main purpose of an interview design is to outline an interview pattern and guide, in order to control and limit the interviewee to the questions of interest (Mayer, 2008, p. 38) as found in (Finkbeiner, 2016, p. 145). It has been argued that attempts to turn the expert interview into a standardised method overlook the unique circumstances of each research project, lead to less relevant forms of interviews, and place three kinds of obstacle in the

way of any attempted methodological generalization. Firstly, all researches rely on a relational concept of the expert, which depends on the topic being investigated (Deeke, 1995, p. 7) as found in (Bogner & Menz, 2009, p. 44). Secondly, conversations with experts constitute a particular social situation that is especially vulnerable to interferences; this may not invalidate the basic principles of how interviews should be conducted, but it sets limits for the range of prescriptive methodological rules available (Vogel, 1995, p. 82) as found in (Bogner & Menz, 2009, p. 44). Thirdly, it has been argued by Trinczek that one cannot impose a certain way of carrying out expert interviews. Interviewers will always have their own distinct interest in the subject under examination, and their own detailed questions to which they are seeking answers. This inevitably leads to variability in the use of this instrument of enquiry (Trinczek, 2009). For example, "*Depending on the interviewer's interest and the research question under investigation, there will be differences between conversations with experts in respect of the extent to which they are pre-structured, the openness with which they are conducted, and the ways in which they are processed, evaluated and interpreted. This seems to mean that a proliferation of ways of proceeding is unavoidable in the area of expert interviews*" (Bogner & Menz, 2009, p. 44).

6.4 Method and ethics

From the mid-1990s, awareness of the importance of ethics increased considerably, as can be seen in the works of (Penslar, 1995), (Smith D. M., 1995) and (Hay, 1998). As my project is funded by the Economic and Social Research Council ESRC, I acted in accordance with the ESRC's Research Ethics Framework (REF) guidelines, along with the research ethics of Aberystwyth University, which advocate for "*respect for the rights, safety and well-being of all human participants and animals*", "*respect for other cultures, values, traditions and the environment around us*" and "*honesty, integrity and professionalism at all times*". However, sometimes there are ethical dilemmas beyond those of the committee's and institution's standards that must be dealt with (Bryman A. , 2012), and researchers should ensure diligence when dealing with unplanned ethical dilemmas during the research process (Guillemin & Gilliam, 2004).

The right of an interviewee to withdraw from participation at any point is fundamental to the ethical research process in social sciences (SRA, 2003), (Qu & Dumay, 2011), (Seidman, 2013), (Iphofen, 2015). Ethical consent forms were sent along with the interview invitation to each interviewee (See appendix). As a researcher, I aimed to be objective and I did not express any of my knowledge on the field or object to interviewees' opinions during the interviews. I aimed to provide interviewees with sufficient uninterrupted time to extend their answers according to their specialisation and provide details that I would otherwise not have been aware of.

The invitation form sent to participants had a binary role. First, it included detailed information on the aims and objectives of the research, and a proposal for a face-to-face interview or an interview via Skype if that was preferable for the interviewee. Second, the form included ethical insurance that the interviews would be completely anonymous and stored securely in accordance with the Aberystwyth University ethics procedure and associated with my ethics reference number (See Appendix). A good sign in relation to the quality of the research was that none of the interviewees withdrew from the process abruptly. Additionally, most of the interviewees agreed to audio recording of the interviews, as participants were assured of confidentiality, thereby reinforcing the trusting relationships formed in the research process (Hall, 2014).

When feasible, my interviews were conducted face-to-face, which provided me with nonverbal and contextual information, more control of the interview and trust-binding between myself and the interviewee. When costs and distance were prohibitive, I used Skype to conduct interviews, which saved time and money. Although it has been argued that phone or Skype interviews provide less control of the interview situation, the video was valuable in terms of nonverbal input, and enabled me to judge when I needed to speak and control the flow of the interview.

Most of the interviews conducted were recorded and fully transcribed to avoid information loss. Topics were explored deeply, as sufficient time was available to let interviewees describe any aspects in as much detail as they wanted. What is more, I allowed interviewees to talk about topics that they introduced themselves, which gave a different insight in my

research. To do this, I avoided imposing the interview structure and let interviewees develop their thoughts freely after each of my questions.

6.5 Data analysis

As Patton argues, "*The purpose of qualitative analysis is to interpret the data and the resulting themes, to facilitate understanding of the phenomenon being studied* (Patton M. Q., 2002). I ensured that my data and results were rigorous and of high quality, as it has been argued that, "*Within qualitative research, two main strategies promote the rigor and quality of the research: ensuring the quality or "authenticity" of the data and the quality or "trustworthiness" of the analysis*" (Patton M. Q., 2002), (Kuper, Lingard, & Levinson, 2008). These strategies have been followed throughout my research project.

The data came from authentic, original sources of knowledge, and the analysis of those data involved thorough examination. While examining and deconstructing my interview transcripts, I broke down the data to assess what was included. During this process, I read and re-read the interviews, then break down the data into themes and codes according to the content. After deconstruction, I interpreted the coded data in a way that enabled comparison between transcripts and themes. The themes, sub-themes and the codes were developed carefully after analysis of the transcripts. Transcript data dealt adequately with sub-questions, which derived directly from the major questions of my research project. Many similarities and contrasts were seen among the interviewees' opinions on different themes (for example the Barents as a new energy region versus the Barents with no fossil exploration), which enabled me to reconstruct the prominent codes and themes and gain solid insight into each theme, sub-theme and code. Reconstructed data are included throughout the results chapters to add credibility and uniqueness to my findings.

Table 2: Themes and codes in my qualitative data

Themes	Codes	Sub-Codes
EU energy security and Barents geopolitics	• EU energy security • Barents Geopolitics • Barents Geo-economics	• Norway–EU energy relations • Russia–EU energy relations • Barents potential for energy • Barents potential for shipping • Svalbard Treaty–EEZ
Raw materials, fossil fuels and fisheries and mining	• Oil • Natural Gas • Renewables • Fisheries • Mining	• Exploration and new drillings • Installing new renewables • Co-operation on fisheries • Reducing mining activity • Snow Crab
Indigenous populations	• Societal security • Environmental security • Russian indigenous • Sámi in Norway	• Environmental degradation • Herding • Cultural protection • Sustainable fishing

Discourse analysis of official and unofficial data documents was performed. The production of official information is a distinctive process with specific purposes. Official sources of information are considered very valuable in human geography. Migration flows, market movements, crime patterns, election analyses and many more data relying upon official information. Nevertheless, the use of official data sources requires four key aspects of the data to be considered. Why was the information constructed? To which government policies does the information relate? Have policy concerns influenced data construction? If so, in what ways has the data construction been influenced? As Hammersley and Atkinson argue, "*rather than being viewed as more or less biased sources of data, official documents and enumerations should be treated as social products: they must be examined, not relied on uncritically as a research resource*" (Hammersley & Atkinson, 1995, p. 168). In order to

deepen the analysis of discourse data, it is worth considering whose voices are present and whose are absent; for example, in an EU report, one can observe which member states have no representatives. In addition, the mechanisms of production for the report should be identified, along with the rhetorical content of the text (Cloke, et al., 2004).

Non-official data sources can also provide human geographers with abundant and valuable information. These sources have the advantage of providing access to worlds that are considered to be inaccessible and comparably closed. Of course, some aspects must be taken into consideration. "*All accounts of social events are of course 'distorted', as there is always an element of selective accentuation in the attempt to describe social reality. The question of credibility concerns the extent to which an observer is sincere in the choice of a point of view and in the attempt to record an accurate account from that chosen standpoint*" (Scott J. , 1990, p. 22). Mass media is one example of non-official data. Such media outline the ongoing situation of the world, record significant changes in cities, regions and nations, and sometimes explain why these changes happen and their implications. As a result, our geographical views of places, individuals and societies are partly shaped by the news. For my area of interest (the Barents Sea, the European Union, the environmental protection and the indigenous populations), I analysed information from international and local media, the most important of which included the *British Broadcasting Corporation*, *Arctic Today*, the *Barents Observer*, *Bloomberg*, *The Economist*, the *Guardian*, *Reuters* and the *Arctic Institute*. Through my media analysis, I identify, present and frame information with the purpose of depicting and improving a specific issue. For my media analysis, I read and scrutinised many articles, mostly from 2015–2018 but some from earlier, which helped me to create a clearer picture. Each article or report was read carefully, compared and verified with policy documents, official speeches and/or field developments in the area. Each article and source were classified under my research themes and codes (table 2).

Data triangulation is an important procedure during data analysis as a piece of data or a finding must be verified with several different research methods or data sources and has a crucial role in maximising the credibility of research results. In data triangulation, it is assumed that each individual has a unique and valid world view, so the aim is to identify patterns and contradictions beyond the individual's experience. In my research, I have used

several methods that enable triangulation because a single method cannot shed light on an issue to an acceptable degree and because using multiple methods can improve understanding (Patton M. Q., 1999). The methods I have used in my research – qualitative research via semi-structured interviews, theoretical analysis from the Copenhagen and Welsh schools of thought of international relations and discourse and policy analysis of official and unofficial documents – are all considered to be accurate methods for data triangulation.

Limitations were applied in the design of my research to keep the scope manageable. I restricted the geographical area to the Arctic area between Norway and Russia, with emphasis on the Barents Region, as this is the 'European' Arctic and a is new and potentially prominent energy region. Moreover, I focus more on the fossil fuels in this area rather than on mining or fisheries (although I acknowledge these as they were, and some still are, critical to the development of the region), as my research is more focused on the energy security of the EU in relation to this region.

All individuals who I selected for interviews but did not reply to the first interview invitation – just 9.5% of the total invitations – were contacted twice. Once invitations had been accepted, we mutually decided on the time and place of the interview. I had excellent responses from Norwegian officials and academics, probably because Norway wants to disseminate and stress the multidisciplinary importance of the Barents Region through academic research within the EU and the UK. Responses from specialised academics from around the world and from the UK were equally positive. Responses from the EU were more limited, but two officials from the Directorate General for Energy, one of 33 policy-specific departments in the European Commission, did agree to an interview. Finally, I had no response from private companies or any Russian official or organisation. I tried multiple times to contact Russian officials, but I had no response. Consequently, the lack of Russian views and responses to my questions are limitations of my qualitative research. The closest I was able to get to including Russian views were an academic expert in Finland and Russia, a Norwegian senior researcher focused on Russian affairs, a Norwegian expert on the views and strategies of Statoil and Gazprom and a Norwegian expert on fossil fuels in the Barents Sea and future developments.

During the initial stages of the selection of interviewees, I contacted officials from the EU, academics from the Arctic Yearbook, where I had published an article, experts suggested to me by my supervisor and an expert from the Fridtjof Nansen Institute, whose research focus was similar to mine. I also contacted Russian experts and oil companies but received no replies. After contacting this first group of potential interviewees, I recruited more experts to interview via the snowballing technique. The final number of participants were 21. Eleven of these were from the Fridtjof Nansen Institute, Norway, two were EU officials, and six were academic experts from the UK, Canada, Finland, Russia and Greece. The other two interviewees were from the UK department of Business, Energy & Industrial Strategy and the Norwegian Ministry of Petroleum and Energy. The limitations of this group of interviewees are a lack of Russian academics or experts, a lack of oil and gas industry representatives and a lack of representatives from indigenous populations. To address these limitations, I consulted experts on Russian affairs in Norway, Finland and the UK, official documents from oil and gas companies involved in the Barents Region, and academic papers and press releases concerning the indigenous populations. Overall, the interviews with these selected experts added a value to my research by providing an extended point of view and in-depth knowledge of the research content.

Unsurprisingly, the Norwegians had the most collaborative attitude, presumably owing to their need for research and understanding of the Arctic from 'southern' researchers. Researchers at the Fridtjof Nansen Institute, Norway, invited me for an institutional overseas visit for archival and qualitative research. The EU officials gave me a clear picture about the EU's understanding – and misunderstanding – of the Barents Sea, and the six academics commented vigorously on the topic and added their views for the future of the region.

6.6 Reflections

In this chapter, I outlined the structure of my research for the project and presented the core of the methods used, enabling data triangulation and robust data production in a responsible, honest and systematic way. I believe that my methodology and the data

produced from my research contribute to the intellectual dignity of academia. The following three chapters present the findings of my research.

Chapter 7

Critical Energy Security in The European Union

7.1 Introduction

After the presentation of the literature review, I now proceed towards the first goal of my thesis, which is to examine energy security in the European Union (EU) within the context of critical security studies. Firstly, I scrutinise the applicability of critical security studies to the energy sector and then discuss energy securitisation and desecuritisation between the EU and Russia. Two more goals, to explore the energy interrelations among the EU, Norway and Russia, while at the same time not neglecting environmental and societal security issues, are being examined separately it the next two chapters. In this first results chapter, I address my first research question: "In what ways can critical security studies be applied to the energy security of the EU in relation to Norway and Russia?"

In order to understand how and why energy falls under the security umbrella, and specifically under securitisation theory, the geographical context which is embedded in needs to be examined. Critical security studies of international relations can be considered an adequate tool for analysis of the energy security of the EU, as they enable in-depth examination of non-military issues. The Copenhagen School is also quite western-centric, so is arguably sufficient for this analysis. The concept of energy security in the EU soared on the European agenda in the late 2000s and has since kept a high profile in contemporary policymaking. Debates over energy security escalated after gas disputes and cutting off supplies between Russia and Ukraine between 2006 and 2009, which affected several EU countries.

This chapter draws upon the concepts of the Copenhagen School of Thought and the Aberystwyth (or Welsh) School of Thought of international relations, particularly in relation to the energy security of the EU. In doing so, the discussion sheds further light on the complexities and implications of a politicised energy sector in an intergovernmental organisation such as the EU. The chapter begins with the general application of critical

security studies to energy and to the energy security of the EU. Section 7.3 depicts the status of the EU's energy sector in relation to securitisation and desecuritisation. The following four sections are dedicated to energy desecuritisation between Russia and Europe, and the findings highlight the advantages of a desecuritised energy sector.

7.2 Applying Critical Security Studies to Energy

Energy security is one of the most important aspects of foreign policy both for exporting and importing countries, so countries are using any possible means to achieve this security. For consuming countries, energy security means obtaining energy resources unhindered whenever needed and ensuring supply at consistently reasonable prices. For producing countries, energy security refers to the exploration and exploitation of new energy resources to assure continuity of exports. In addition, energy-producing countries are constantly looking for new technologies to enable exploration of harsh environments, greater production from existing fields and reductions in the costs of production. Moreover, stability of their energy production safeguards their economic and political interests while meeting the global need for these resources. Finally, as the world will continue to need these resources, producing countries are in favour of liquidity and foreign investment to support exploration and exploitation that supports further production.

Although the EU is not a nation state and it does not have a common energy policy, its main energy strategy is focused on building interconnections among its member states to increase their energy resilience so that they can act as one, stronger body. For that reason, I consider the EU as a single actor while acknowledging the big differences between its member states in relation to energy security.

The aim of critical security studies is to foresee potential small-scale threats to society so as to avoid dealing with traditional security aspects, such as military. The intention is to identify elements of society and the environment that could lead to war if left unattended to. In the face of a world war or global crisis, traditional security theories would have greater use and most critical security studies would be forsaken until restoration of peace.

Some research has looked at the application of the Copenhagen School of thought to energy security, but there is a lack of literature on application of the Welsh School of thought or of emancipation theory to energy security.

As argued by a senior research fellow at the Fridtjof Nansen Institute during my qualitative research, the Arctic has to be kept out of the hard security and geopolitical agenda; the area has to be kept clear of defence matters.

"*You might say security in the Arctic Council will overshadow everything else, but security is silently entangled in all the aspects. There is the use of the Copenhagen School of thought and this is working quite well. Russia, the US and Canada are stressing security issues most, while smaller countries do not*" (Senior research fellow (iii) at FNI, 2018).

With my research, I aim to stress the important contribution of the Copenhagen School to the analysis of my concept but also to point out where the Copenhagen School is insufficient and how the Welsh School can contribute towards a more holistic approach.

In the Copenhagen School of international relations, the term security refers to five separate sectors: political, which involves the internal and external stability of states; military, which combines the defensive and offensive capabilities of states; societal security, which encompasses the stability of cultural identity; economic security, which covers the access of resources and markets; and environmental security, which concerns protection of the ecological biosphere (Buzan B., 1991, p. 19). Energy security is not a separate sector, which could be justifiable because energy is part of at least four of the aforementioned sectors. Energy self-sufficiency and economic development is part of the political security of a state, which incorporates certain diplomatic relations with other states. Energy is also a crucial aspect of military security. Unpredictability and fluctuation of energy markets affect economic security, which is defined by "*the difficulty to foresee the behaviour of economic actors in a decentralised capitalist economy*" (Buzan B., 1991, pp. 235-237). Finally, environmental security has strong links with energy security, as it incorporates the exhaustion of fossil fuels and the contribution of fossil fuels to the adverse effects of climate change and pollution.

In the sectors connected with energy security (like political, economic and military sectors), the referent objects – the objects under threat that require security measures – also relate to energy. Within the political sector, the referent object is internal stability, which could be enhanced through the provision of reasonable energy prices to the peoples of the state and by maintaining jobs in the energy sector, even if this means the use of coal or nuclear plants. Clearly, the referent object in military security is the state and its defensive capabilities, which rely on adequate energy supplies for military vehicles. The fear of insufficient energy supplies for the population and the military contributes to securitisation of politics and the military. In these cases, the securitising actors are political elites, military officials and think tanks, who use speeches, reports and geopolitical analysis to bring the issue into the political or security agenda.

In the definition of economic security "*access to the resources, finance and markets necessary to sustain acceptable levels of welfare and state power*" is very important in relation to energy (Buzan B., 1991, pp. 19-20). The main characteristic of economic security is that the referent objects are only a few industries and corporations that are crucial to the economy of the state and/or the world, such as huge state-owned companies and large banks. Securitisation in economics is mostly connected with the risk of investments and refers mainly to the possibility that economic dependencies (like fossil fuels) within the global market will be exploited for political ends or, more broadly, questions of security of supply (Buzan B., pp. 114-116), the long-term investments that energy transformation demands and the integral role that national energy industry monopolies have in the economy of the state. On this basis, it is apparent that energy and economic security are deeply associated.

Environmental security has been defined as "*the maintenance of the local and the planetary biosphere as the essential support system on which all other human enterprises depend*" (Buzan B., 1991, pp. 19-20) & (Buzan, Wæver, & de Wilde, 1998, p. 71) & (Buzan & Hansen, 2009, p. 450). It is important to identify the referent object here, which is not nature per se but the human environment. Accordingly, the securitising move could be identified as sustainability, which is inherently connected with the use of energy (Bruyninckx, 2006). The

major securitising actors in this security complex are the scientists who indicate the environmental threats to the public and the political sphere (Buzan, Wæver, & de Wilde, 1998, pp. 71-72) while arguing for countermeasures to tackle or even mitigate rising temperatures. Following the above reasoning, it can be argued that the securitisation of energy partially materialised through the proliferation of environmental securitisation, as consumption of fossil fuels poses an existential threat to the survival of the human environment. Mulligan has clearly depicted the connection between environmental and energy security. "*Fossil fuels are now decidedly a principal threat to, rather than a component of, 'the environment' … [i]nternational agreements addressing other environmental resources may offer … models for dealing with a future of declining energy and climate security, without resort to 'traditional' mechanisms of conflict among the world's states. But such a shift in the practice of energy security necessitates a shift in the concept of security that, instead of emphasizing state-centred and military aspects, is grounded in discourses of global and human security*" (Mulligan, 2010, p. 85). For that reason, energy security is inherently connected with environmental security, as traditional energy production and consumption could lead us – if it has not already led us – to an irreversible environmental catastrophe.

Therefore, it can be argued that energy is mainly being securitised through the sectors of political, economic and environmental security, making these sectors deeply interdependent. Energy is connected to and overlaps with political, military, economic and environmental securities. Even if energy security does not form a separate sector in the theory of the Copenhagen School of thought, the relevance of energy security to recent tensions in international relations has increased. It could be argued that the energy sector is now so interdependent with political, environmental and economic goals that to separate it that analysing it in isolation from the other security sectors and transforming it into a unique sector, would be futile.

Within contemporary politics and international relations theory, the concept of energy security that serves only the security interests of states becomes more and more unwarranted. Changes in thinking about energy security must move towards a deepening of security for "*people in general … rather than just the citizens of states*" (Walker, 1988, p.

121). Safeguarding the continuation of humanity and global ecosystems as we know them are more important than securing borders and the state per se. As threats evolve and become less relevant to the military and/or the economic security of the state but more relevant to the people who rely on the prosperity of the global environment, more sustainable and abiding solutions for energy security are necessary.

Energy-related interactions, such as production, purchasing and transit, between two or more actors create an energy dependency relationship within a narrow geographical area. It is not unlikely that within these regional energy security complexes, such interdependencies will be perceived as a threat (securitisation). "…*since most threats travel more easily over short distances than long ones, security interdependence is normally patterned into Regionally based clusters: security complexes. […] [The] process of securitization and thus the degree of security interdependence are more intense between actors inside such complexes than they are between actors inside the complex and outside of it*." (Buzan B., 1991, p. 190). Accordingly, close geographical proximity is an important factor in the intensity of threats between states and regions that arise from energy dependencies. Nevertheless, even states and regions that are not in the same geographical area could belong to a chain of energy interdependency through a grid of oil and gas pipelines thousands of kilometres long. In line with the above arguments, Scandinavian, Baltic and East European countries are more concerned than West European countries about the Russian threat because of their proximity. West European countries that do not border Russia are instead concerned about energy interruptions because of their energy interdependency through pipelines. In this way, energy flows from the Arctic to the EU create a system of regional and inter-regional concerns or even "threats".

Critical energy security analysis is challenging the current economic, political and technical hypotheses that support arguments on energy production and consumption on the basis of traditional studies. At the same time, it is challenging the approach of defining the nation-state as a major referent object, as in traditional perceptions of security. Critical security theory began with the removal of environmental security from the traditional security agenda by questioning its state-centric presumption. However, energy security is interconnected with fossil fuels and so is also connected with the traditional security

framework because the significance of energy to state industry and military is crucial. For that reason, a critical energy security perspective moves the focus from the state to the marginalised and deprived individuals or smaller communities for whom access to energy needed for their basic personal needs is insufficient and insecure.

Even though the emphasis on the individual has been strengthened, Newman (Newman, 2010, p. 79) argues that when the circumstances are ideal, the state remains the central provider of security. This argument applies to almost all, if not all, member states of the EU and the EU itself in relation to energy and environmental security. In addition, McDonald (McDonald, 2012, pp. 52-53) noted that communities can have an important role, by being a solid ground for group identification and the pursuit of justice. This is very relevant to the indigenous populations of the Barents Sea and for marginalised individuals and communities within the EU. Nevertheless, the state still is and will remain a potential actor that could either support an emancipatory transformation or act in a counter-revolutionary way and thereby intensify insecurities. Therefore, the study of the state's decision-making process cannot be disregarded on the basis that the referent object has changed. However, instead of focusing solely on national energy security and the supply of energy to the military and industries, analysis has deepened to include the repercussions of energy insecurity on marginalised individuals and communities.

Until recently, energy security was treated as a concern of states, mostly because of the economic and military importance of energy to the modern nation-state. Most studies of energy security focus on fossil fuels, and oil is often highlighted to a greater extent than natural gas and coal because it is crucial for the military and transport sectors and, as Dalby has pointed out, "*Oil is not a resource that the marginalised peasantry of the Third World are directly fighting over; it's a matter of superpower competition*" (Dalby S. , 2009, p. 75). Nevertheless, the energy environment is changing – renewables, such as solar and wind power, are gaining more space within the energy mix and, consequently, are becoming more important in the energy discourse. The increasing efficiency of renewable sources, the impacts of fossil fuels on the climate and the energy threats associated with fossil fuels are the main reasons for this increase.

These new energy technologies do not come without new challenges though, and critical analysis is necessary to understand the relationships between technology and society. Even in 1986, Kranzberg argued that technology is not neutral (Kranzberg, 1986). Indeed, it is not unusual that technology "*reflects and reinforces existing power relations*" (Curran, 2006, p. 75). The demand for technological development from society can be easily used by elites to accumulate support for disputable and over-priced technologies in the traditional security field (Peoples C. , 2010). Therefore, while all massive and technologically demanding energy projects pass through a lot of state decision making, critical analysis of energy security must include discussion of the inherent bias connected to energy technologies (Mander, 1996, pp. 347-348). As Simpson has argued, "*the discourse of energy security is still employed by the government and business elites to justify top-down investments in large-scale energy projects, which require significant initial capital injections and subsequent industrial scale capital returns*" (Simpson, 2007). In addition, Mulligan pointed out that "a *securitisation is thus a tool that enables states to take exceptional measures, including repression or the suspension of the public freedoms considered normal in the West*" (Mulligan, 2011).

The concept of security in the Copenhagen School is, according to Browning and McDonald, ominous, but among the Welsh School, security is considered progressive (Browning & McDonald, 2011). In addition, instead of the "*panic politics*" that accompany the securitisation process of the Copenhagen School, the Welsh School argues that "*true security refers to the emancipation of the poor and disadvantaged*" (Floyd R., 2010, p. 48). Critical energy analysis not only allows the shift of the referent object from the state to the individual or community, but it also allows for new perspectives on the pursuit of energy security while enhancing, global, environmental security. It is worthwhile, if not an imperative need, to identify and support poor and marginalised communities in the EU and the Barents Region by including those communities in the widening of the security agenda and by placing the referent object wisely. Nevertheless, it is crucial to ensure that the inequalities and injustices in the broader society do not infest the community to be helped.

Buzan argued that "*The 'national' security problem turns out to be a systemic security problem in which individuals, states and the system all play a part, and in which economic, societal and environmental factors are as important as political and military ones. From this*

integrative perspective, the levels and sectors appear more useful as viewing platforms from which one can observe the problem from different angles, than as self-contained areas for policy or analysis" (Buzan B., 1991, p. 368). The literature of the Copenhagen School of thought has enabled me to scrutinise the given data and question what I knew about international relations and energy security. For example, critical security studies have shown me that, although military security is still dominant, other security sectors could or already have become more important than military security in many places within or close to the EU, leading to reconsideration of security priorities. My research has shown that environmental, energy and human security have become more important than military security, as rising temperatures and sea levels, energy disruptions and marginalisation of communities are affecting the lives of people and states more than the potential for a military threat.

As the EU interacts with the global order and consists of different states with different perspectives, the regional levels of socio-political coherence fluctuate and transform. Critical security studies provide a large degree of adaptability so the researcher can correlate them with the system under research, with only minor adjustments. The fact that the energy security of the EU is a macrosecuritisation is clear, but its structure and purpose are matters of debate. Previous macrosecuritisations, such as the war on drugs, global warming and national security, set a clear foundation on which researcher can securely build in other sectors. An enduring macrosecuritisation of the EU's energy security could have large effects on policies for environmental protection, domestic economies and human prosperity. The Copenhagen School of thought provides a tool to deconstruct a security issue by scrutinising each element, resulting in a comprehensive understanding of the intricacy of the issue and how to create a meaningful discourse about it. The discourse produced, even if complicated, reveals the inter-relations between the various levels and sectors of security involved. An excellent example of macrosecuritisation is the Cold War, which Buzan says was "*capable of structuring the mainstream security dynamics of interstate society for several decades*" (Buzan B., 2006). I argue that the same line of argument can be applied to the energy security of the EU.

During attempts to mitigate the energy insecurity of a community, a state or at the EU level, attention must be paid to the technologies and energy sources used to avoid creating other

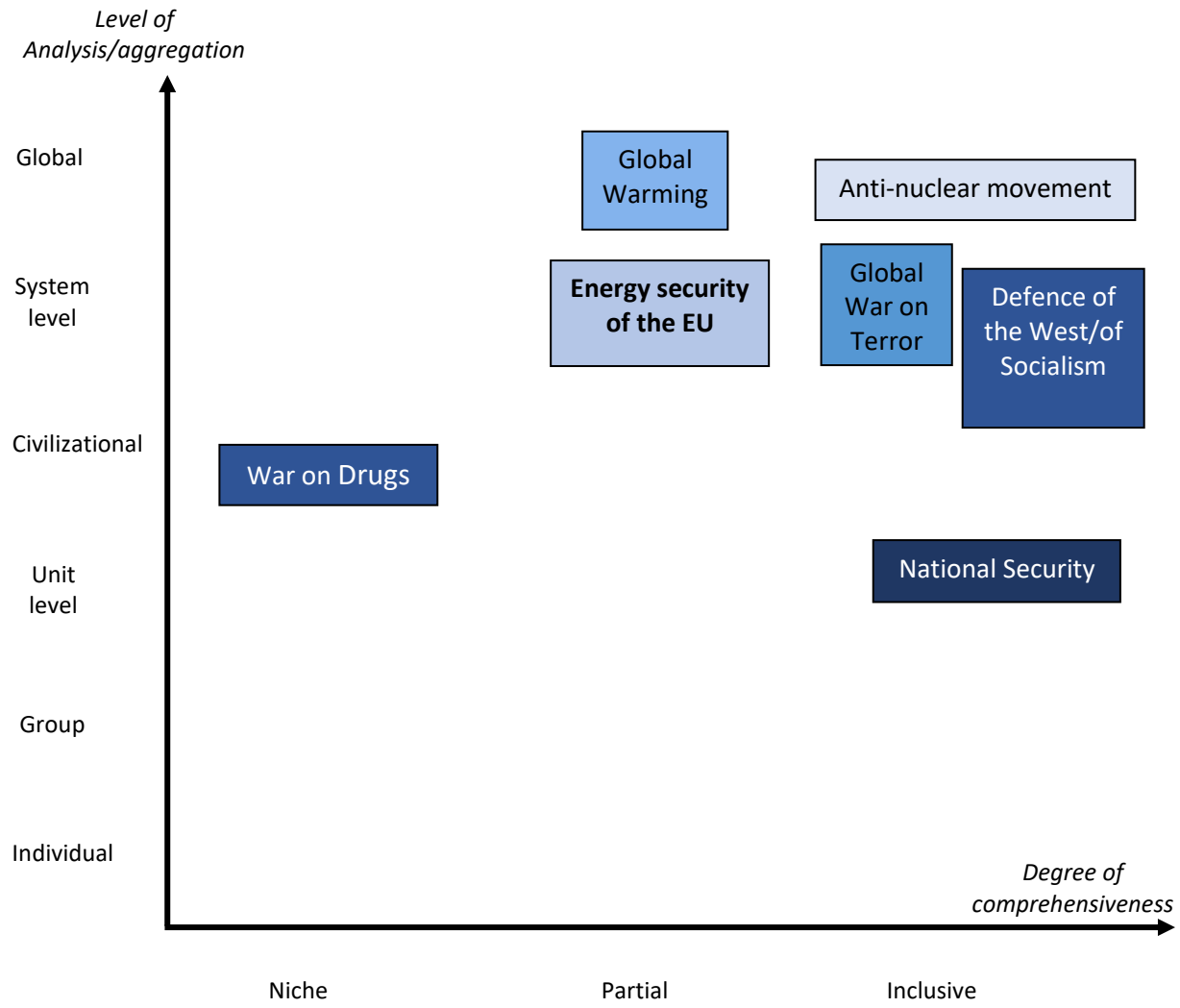
insecurities, such as environmental or political insecurities, either within the community under examination or for other communities or individuals. This contemporary critical approach to the concept of energy security is essential, as it is becoming increasingly clear that we are failing in climate change, chemical pollution and plastic pollution as a result of the extensive and unsustainable use of traditional sources of energy that negatively affect the environment, society and the economy.

It has been argued that the securitisation process functions better at middle levels of analysis than at the individual or system levels (Buzan & Hansen, 2009, p. 254). On this basis, a large regional system characterised by various securitisations could form a macrosecuritisation that would enable better analysis. Macrosecuritisations are characterised by larger scale entities and elevate securitisations into wider structures. They are also more complicated than securitisations, as they combine higher and lower securitisations, each of which could become desecuritised, leading to the collapse of the whole macrosecuritisation system.

In my research, a macrosecuritisation could be formed by securitisation of the environment by the EU (environmental security), securitisation of Russian aggressiveness at Crimea (military/state security), securitisation of energy in the Eastern European countries and some Eastern EU member states (energy security), securitisation of state economies in the EU (economic security), securitisation of migration in Southern EU member states (human and societal security) and securitisation of indigenous populations of the Barents Region (human security). Figure 1 in section 2.2.4 of the literature review, illustrated energy security within the macrosecuritisation framework of Buzan and Wæver, including lower levels, such as like national and individual levels, for comprehensiveness. Figure 6 illustrates the energy security of only the EU in order to depict and analyse its potential. The energy security of the EU stands at the system level, reflecting the union of national states, and the comprehensiveness of energy security is neither niche nor inclusive, as it is interconnected with many other security sectors, including environmental, national, economic and human. In addition, the energy security of the EU is not a powerful securitisation, as the EU is not a single actor with a single voice and individual needs in the field of energy security. Nevertheless, the EU promotes energy security to its member states through policies, and

some member states promote their energy security through the EU by pushing their interests in the EU policy agenda.

Figure 6: The three Dimensions of Macrosecuritisation: comprehensiveness, level and degree of support with energy security of the EU illustrated. The darker the colour, the bigger the degree of support.



Moreover, the EU can act as a high-level referent object with which many different system actors (member states, organisations, companies etc.) can identify, a crucial requirement for macrosecuritisation, along with power. The EU unites those system actors under common values and common threats, yet those values and threats are continuously adjusting. The existence of several securitisations among the EU and its member states define,

demonstrate and legitimate leadership of the EU governing bodies, support claims to exceptionalism and special measures, facilitate and sustain the alliance of the EU, and help to define spheres of influence and boundaries of control. All these aspects contribute to successful energy macrosecuritisation at the EU level. The interaction and overlap among environmental, economic, energy, military and human securitising moves create a holistic framework of analysis for the selected macrosecuritisation of energy within the EU.

We have seen that the energy trade structure addresses the lack of self-sufficiency for energy within the EU. Nevertheless, as future reserves of fossil fuels are mostly concentrated in fewer states with uncertain political stability, diplomatic tensions and hostilities could develop. For this reason, contemporary energy security complexes and communities are defined within a specific geographical area where adverse and beneficial dependencies coexist. For example, in my energy security analysis among Norway, Russia and the EU, there is a determined geographical area with multiple dependencies, both adverse and beneficial.

Critical security studies have contributed greatly to the understanding of contemporary energy issues by broadening the agenda to include non-military issues and deepening the agenda from the state level to the community or individual level. Energy can be now classified as a security issue without any military involvement. As the Copenhagen School of thought does not focus on the community or individual level, I employ the Welsh School of thought to address insecurities of marginalised communities within the geographical area of my research. Emancipation from energy insecurity within the EU has mostly succeeded at the state level, but there are still rural communities among member states who struggle to meet their annual energy needs and individuals, such as homeless people, who have insufficient, if any, access to energy for their basic needs.

Through my research, it became apparent that energy interdependency can easily move from the political agenda to the security agenda if there are other controversies or conflicts among the involved actors that could cause an adverse energy dependency to be developed. My research has shown that such adverse energy dependency exists among Russia, the EU and some Eastern European countries. By contrast, when the only threats

among the actors are the security of energy supply and demand, beneficial energy interdependency is expected to be established, following the rules of the energy market. Accordingly, my research shows that this is the case between Norway and the EU.

Within a democratic sphere, desecuritisation of issues that have reached the security agenda could be beneficial for all actors involved. The main use of securitisation studies is not to examine an already securitised subject but to deter securitisation by keeping important policy areas at the political level. Keeping the energy sector on the political agenda rather than the security agenda is positive for international relations, the economy and public prosperity because the debate at this level can incorporate a wide range of voices, echoing the needs of modern society.

Renewable energy sources are constantly changing the field of energy security, not only in the EU but also globally. Until now, the dialogue in relation to securitisation of energy has mainly focused on the security of supply from fossil fuels, an aspect that renewables are changing. Installation of facilities to produce renewable energy within the territorial boundaries of states means they can produce energy domestically. The sun shines and the wind blow almost everywhere. Communities, states and the EU are responsible for promoting policies and securing the funds and technology needed for such projects.

Keeping energy desecuritised in the EU would not lead to a collapse of other significant security issues in the EU, such as environmental, human or even state security. Nevertheless, it would be a robust step towards macro**de**securitisation, as it would enable policymakers to focus on other potential desecuritisations. The ideal element for that is a "*policy which mixes elements of a national security strategy with elements of an international security one*" (Buzan B., 1991, p. 112), but this is difficult to achieve, and absolute security may never be reached. EU policies struggle to incorporate everyday changes in different sector policies and alterations in securities and their distinct components. Depending on the political climate, every security analysis could be outdated after six months as a result of dramatic changes in the political and security fields. Nevertheless, employing the Copenhagen and the Welsh School of thoughts of international relations has enabled me to present a robust analysis based on an understanding of the

global idea of security and scrutiny of the intricacies that affect security. Finally, the two schools of thought applied provide tools to recognise when ends justify the means in a security policy but also – because science must be long-sighted compared with the short-sighted nature of politics and policies – to anticipate further in the future and make decisions to create a new era of security policies.

7.3 Energy Securitisation and Desecuritisation in the European Union

Although the reasons for the crisis between the EU and Russia are still unspecified and ambiguous, the position of Russia in the European energy market has been harmed. The respectable reputation of Russia as a reliable energy exporter was significantly damaged after the disruptions in energy supply through the Ukraine in 2009. The need for significant diversification of energy supplies became clear to the EU, and voices arguing for a European energy policy became louder. Indeed, the 2009 energy crisis promoted a debate about establishing more comprehensive rules for energy imports and energy security (European Official on Energy Security, 2017). The 2009 crisis brought the issue of energy between the EU and Russia to the brink of securitisation because it initially threatened the security of supply in the EU and subsequently jeopardized the security of demand from Russia by exposing its status within the EU's energy market.

In my interviews, an academic energy specialist, who focuses on global energy issues provided an important example of how energy fluctuated between the political and security agenda in the EU at this time.

"*In a sense, there is a contradiction between the western neoliberal states wanting to – whether they do it explicitly or not – securitise energy issues, when in fact they rely on the market to deliver energy security. So, the fundamental issue is having a functional global energy market, particularly in oil. Anything that involves a lot of state intervention is not really seen as acceptable and the EU is increasingly a market welfare state. The dominant approach is to make markets work, although I think there is a kickback against that at the moment because most exciting European influencers within European Commission like the idea that all the states should club together to negotiate with Gazprom. That is a complete nonsense and is also completely against competition norm, but it does show a change in*

politics, it shows a central European perspective on what the problem is and what the solution is. One recipe – a UK recipe – might be to have sufficient infrastructure to diversify access to multiple sources of supply in a market system" (British Professor on global energy, 2017).

As the EU has not been able to form a solid and all-inclusive energy policy in order to negotiate with Gazprom in a neoliberal world, each European state should offer investment incentives for the development of modern energy infrastructure (such us LNG terminals) and more renewable energy, which will enable broader energy diversification and consequently more energy security.

Securitisation as a speech act is a complex process that goes beyond the semantic element. The securitisation process includes two levels: the level of agent and the level of the act (Balzacq T., 2010). The level of agent includes the actors, the audience and the context of securitisation. In my research, the main actors of securitisation are the governments of countries that import and export energy and the energy companies. The audiences in the EU, are the European bureaucrats and the national citizens. As the EU represents a multi-level system of governance, decisions are made at a regional, national and supranational levels, so the context of securitisation could be defined as the national level and the European level. European institutions have varying levels of engagement with national policies according to the policy area; in the area of energy security, member states can define their energy policies freely and the EU can intervene only to ensure internal market competition and sustainability. This lack of a coherent common European energy policy and the lack of an international legally binding agreement on energy trade with Russia could be considered the origin of potential securitisation of energy in the EU.

Attempts have been made to develop a common European Energy Policy in the EU since the 1970s, in response to the oil shocks at that time, but this was achieved only in early 2015, when the Energy Union strategy was launched to provide secure, sustainable, competitive and affordable energy to member states. The EU also aimed to set up mutual standards for energy relations with non-EU states, but attempts were unproductive. Russia promoted its

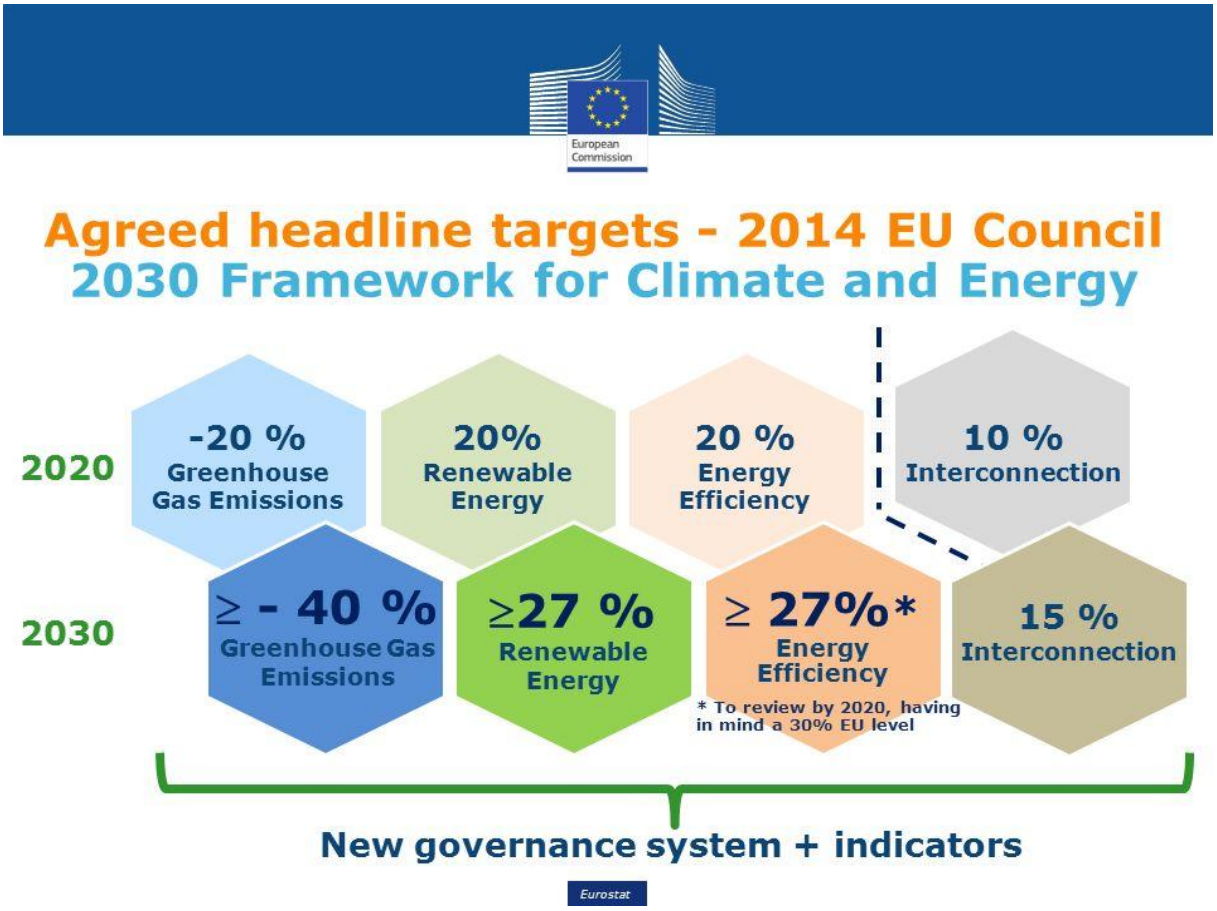
own interests in the absence of a European energy policy and developed energy policies with EU member states individually.

The last and most disruptive energy dispute took place in 2009, between Russia and the Ukraine. This dispute had a great impact on the energy security of the EU and Russia, mostly affecting Eastern European member states but also some Central European states. Amelia Hadfield outlined the magnitude of the 2009 energy dispute:

"*…the 2009 gas crisis accelerated the view of energy by EU policymakers as a strategic commodity and a subject of EU foreign policy. None of the previous disruptions of supplies from Russia had had such an impact on mutual relations. From the European perspective, attempts to diversify its suppliers and transit routes once again illustrate Russia as an unreliable supplier and Ukraine as an unreliable transit state*" (Hadfield, 2016, p. 469).

Her last point is very important, as approximately 80% of EU gas imports cross Ukraine, creating uncertainties for the EU and Russia around the future of energy shipments (Spanjer, 2007, p. 2890).

Figure 7: Agreed headline targets - 2014 EU Council



(Eurostat, 2015b)

Reducing dependence on fossil fuels is not only a concern for the EU in terms of energy security but also in terms of environmental security, especially in light of the Paris agreement, which came into force in November 2016, and the latest IPCC report, which argues that the margin of irreversible global warming is just 1.5°C rather than the 2°C set out in the Paris agreement (UN, 2015) (IPCC, 2018). Development of renewable energy technology is slow and substantial replacement of fossil fuels in the energy mix to create a low-carbon energy economy will take time, but this process is a high priority within the EU, as it increases energy and environmental security.

After the disruptions in 2009, the situation in relation to EU energy policy changed, and many EU-funded projects were proposed in order to ensure energy security. These were "*concrete energy infrastructure projects with a total turn of 3.5 billion Euros for 2009 and*

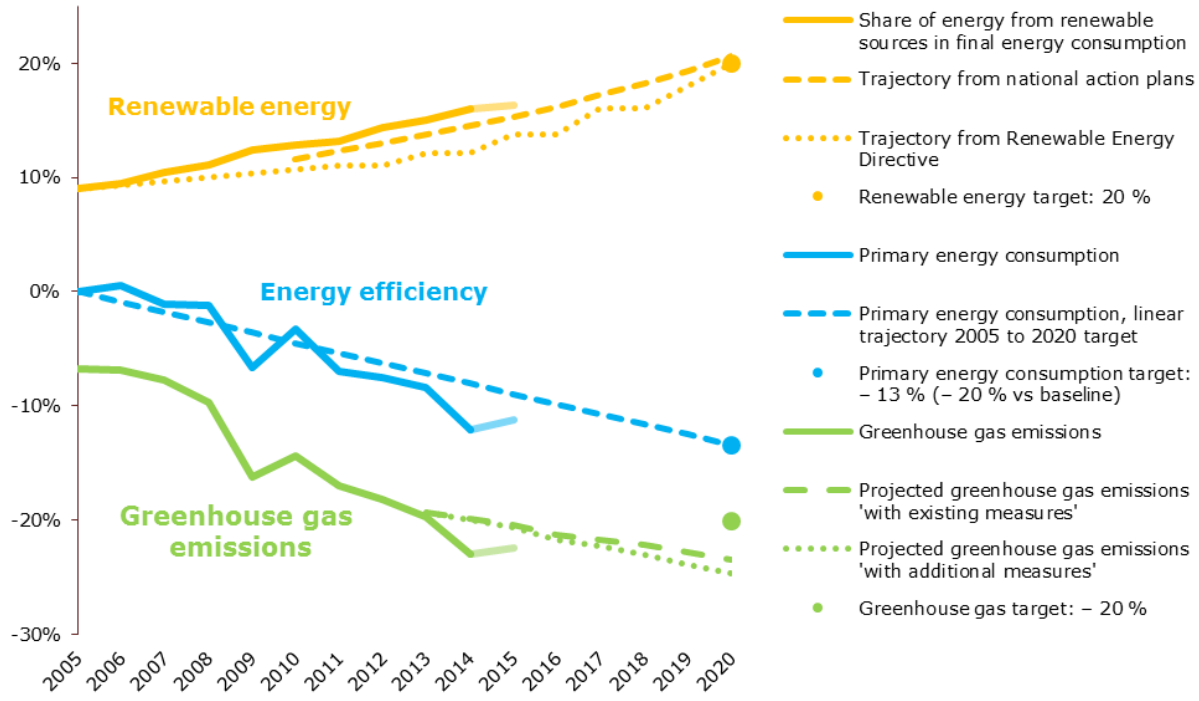
2010 as part of the EU's overall economic stimulus programme in coping with the global economic-financial crisis" (Umbach & Nerlich, 2011, p. 301). The six priority projects were:

1. The Baltic Energy Market Interconnection Plan (BEMIP), which is intended to connect the energy markets of the Baltics and is not expected to be finished before 2021 for gas connections and 2025 for electricity connections (European Commission, 2018)
2. The NABUCCO pipeline project, which was signed in July 2009 but cancelled in June 2013.
3. Development of the LNG projects and gas storage facilities, which in many cases have been successful. In Directive 2009/73/EC of the European Parliament and of the Council (the "Third Gas Directive"), the Commission introduced further measures requiring member states to provide open access to gas infrastructure (including LNG terminals) on fair, transparent and non-discriminatory terms (European Commission, 2009, p. 119). A good example is the Klaipėda LNG floating storage and regasification unit terminal in Lithuania, which is supported by Norway and has been operating successfully since December 2014 (Klaipėdos Nafta, 2017).
4. A development of a Mediterranean Energy Ring to connect hydrocarbon and renewable supplies, which never happened partly because of the Arab uprisings and delays on the TANAP and TAP pipelines – the first opened in June 2018 and the second is expected to open in 2020 (DW, 2018) & (TAP, 2018). The new developments in the Eastern Mediterranean could help the development of a gas hub in Southern Europe.
5. Investment in new North–South gas and electricity interconnections in countries of Central and Southern Europe, which has been effective in developing gas and electricity infrastructure. Nevertheless, in 2016, more interconnections were still needed to ensure the energy security of the Central European member states of the EU and of the Ukraine, and to contribute to the energy security of South-Eastern Europe by enabling the member states to receive and distribute alternative gas supplies in sufficient quantities to compensate for a cut-off of supply from the main source, Russia (Roberts, 2016, p. 29).
6. The North Seas Countries Offshore Grid Initiative (NSCOGI), established in 2010, which is intended to connect national electricity grids and planned offshore wind

turbine projects. This initiative is on track, and the co-operating countries[18] have a clear work programme (Platform, 2016), (European Commission, 2016).

In addition to these measures, the EU set the '20-20-20' climate and energy targets for 2020 in 2007, which were enacted in legislation in 2009. These targets are a 20% cut in greenhouse gas emissions from 1990 levels, provision of 20% of EU energy from renewable sources, and a 20% improvement in energy efficiency. On the basis of data analysis and information reported by Member States in 2015 and 2016 and estimates from the European Environment Agency (EEA), the EU is on course to meet each of these targets by 2020. In fact, the greenhouse gas target was already surpassed in 2014 and 2015 (European Commission, 2016), (EEA, 2017). The new 2030 climate and energy framework, adopted by EU leaders in October 2014, builds on the 2020 climate and energy package and involves a minimum of 40% reductions in greenhouse gas emissions (from 1990 levels), at least a 27% share for renewable energy, and at least a 27% improvement in energy efficiency (European Commission, 2015).

Figure 8: EU progress towards the 2020 climate and energy targets.



Source: (EEA, 2017).

[18] Belgium, Denmark, France, Germany, Ireland, Netherlands, Norway, Sweden and the UK

The six priority projects, the 3-20s and the 2030 targets were the first responses of the EU to the risks of high dependency on a single provider for energy supplies. Nevertheless, Russia did not lose its European market share: it delivered more than 36% of crude oil imported into the EU in 2016 (Buffet, 2016) and Gazprom delivered more than 127 bcm of natural gas to the EU member states in 2017 (Gazprom, 2018c). Ten years after the energy disruption, Russia has held its share within the EU market almost undamaged, but the EU has proceeded with diversification of energy supplies and investment and promotion of renewable sources in its energy mix. These processes could greatly affect Russian exports to the EU in the next two decades. This situation has pushed Russia and the EU to look to new energy production regions, such as those in Central Asia, the Caspian Basin and the East Mediterranean Basin, and attempt to control their production and transportation networks.

7.4 The Desecuritisation of EU-Russia Energy Relations

In the aftermath of 2009, the EU and Russia were each trying to secure their energy needs from the other. Nevertheless, different concepts of energy security (security of supply versus security of demand) along with domestic politics and disputes at supranational and national levels almost developed into successful securitisation of energy, with the energy policies of the EU considered a threat to the energy security of Russia and vice versa. For example, increasing governmental control over the Russian energy sector and energy-related disputes between Russia and transit states were seen by the EU as attempts by Russia to treat energy flows as political leverage to implement its will. In seeking energy security in the absence of a European energy policy and in fear of energy disruptions, EU member states developed individual policies that sometimes opposed each other, fuelling a potential energy macrosecuritisation at the system level of the EU. Most supported the diversification of energy supplies and routes, which, in some cases, raised concerns among other member states, such as in the Nord Stream II case. From the Russian perspective, energy resources are considered the primary element in the reconstruction of the country, so most of the energy sector has been under governmental control in an attempt to balance domestic prices and those of international exports[19] in a way that keeps internal consumers satisfied while securing the necessary income for the state from international energy sales. In this context, it is reasonable that private investors, and particularly foreign ones, have very limited access to the Russian energy sector. For these reasons, it can be argued that, regardless of the high interdependence between the EU and Russia, they each see the energy policies of the other as a danger to their own energy security rather than grounds for constructive co-operation.

The only way to ease the tension between these two major actors is to change their perceptions of each other from competitors to partners (Aalto P., 2009, p. 178). A reasonable way for this to be accomplished is a desecuritisation process. A commonly accepted definition of desecuritisation, from the Copenhagen School of thought, is the "*removal of the issue from exceptional politics to the realm of normal politics*" (Buzan, Wæver, & de Wilde, 1998, p. 4). As argued by Claudia Aradau, desecuritisation presents the

[19] Mainly applied to the natural gas sales and distribution.

dilemma of "*what kind of politics we want: the politics of exceptional measures or democratic politics?*" (Aradau C. , 2004, p. 393). Accordingly, desecuritisation is the way to return energy to normal politics. Nevertheless, this is a complicated aim, as the living conditions for the populations of both the EU and Russia depend on energy security, and it would be risky to just change "*security to 'asecurity'*" (Roe, 2004, p. 285). First, the actors who could lead the desecuritisation process need to be identified. The widely accepted definition of the conversion implies that desecuritisation equals politicization. More revolutionary academics argue that desecuritisation is better to take place "*at the level of polity, rather than policy*", guided by the audience rather than the policy-makers (Tjalve, 2011)& (Wæver O. , 2011, p. 472). In addition, it has been argued that desecuritisation could be achieved through international institutions and diplomatic practices that promote co-operation instead of power politics (Krause & Williams, 1996, p. 249). The context of a securitisation is of the same importance in a desecuritisation, so the process of a desecuritisation has to be executed according to the analogous circumstances. In the case of energy, especially between the EU and Russia, I would argue that energy can never be completely desecuritised because many factors, such as the economy, the environment and the living conditions of the population of the two actors, depend on energy. Therefore, policy and decision makers could lead the desecuritisation while taking into consideration the interests of social groups and events that could interfere in the process of desecuritisation, such as protests or revolts.

Even if we argue towards complete desecuritisation, the process of removing an issue from the security agenda is very complicated. It has been proved that securitisation is much easier than desecuritisation. Aradau argues that for securitisation via a speech act to be successful, the audience must relate to the justification for the securitisation process in their day-to-day experiences, and for that reason, the securitising actors use symbolic attributes, such as collective memory and national identity, to support the speech act. Accordingly, it can be argued that desecuritisation is another format of the speech act, designed to "*create a different reaction from one of enmity*" (Aradau C. , 2004, p. 400). An interesting approach has been proposed by Behnke, who argues that "*an issue becomes desecuritised through a lack of speech, not through speech acts affirming its new status*" (Behnke, 2006, p. 65). Along with Behnke, Vuori has added that a successful desecuritisation "*may depend on a*

withering away, but this withering may begin with active moves" (Vuori J. , 2010, p. 191). What is more, as Balzacq recognises, the media, political elites and think tanks are the most capable actors of securitisation (Balzacq T., 2010), so the same actors could facilitate a successful desecuritisation. My research is in tandem with the three last arguments of these academics, as desecuritisation depends on symbolic processes, while specific context and audiences must correlate with the purpose of the desecuritisation.

There are three major levels of energy desecuritisation between the EU and Russia. The first is the domestic level within Russia, the second is the EU internal level (including competition between EU institutions and member states), and the third is the international relations level between the EU and Russia. The same actors who were involved in the securitisation of energy after the 2009 events must be part of the desecuritisation process, either by lack of speech or by placing the issue back into the political agenda rather than leaving it on the security agenda. Energy security must be realigned at each of these three levels in order to reach desecuritisation.

7.5 Possibilities of Energy Desecuritisation Within Russia

Moscow uses the securitised energy sector to sustain its national political and economic conditions. This policy led to a large increase in the Russian GDP between 2000 and 2008, "*by 60 per cent, and incomes almost doubled with wages growing by an average annual 13 per cent in real terms from 2002*" (Sakwa, 2008, p. 313). Nevertheless, the policy was short-sighted, as it did not take into account the continuing investment into the energy sector needed to sustain or increase its production or the violent drop and continuous fluctuations of energy prices after the shale gas revolution. Use of energy to sustain national political and economic status was possible only because of the high energy prices of the late 1990s – "*energy prices doubled during the second half of the 1990s, and tripled during 1999–2000*" (Hunt, Isard, & Laxton, 2002, p. 87). This increase enabled the Russian government to pay off its foreign debt and effectively handle the natural gas market, which is not worldwide like the oil market but is limited to three main regions – North America, Europe and East Asia (Böhme, 2014, p. 60). For this reason, the "*Price formation* [of gas] *varies according to*

the degree of liberalization the respective markets find themselves in and more specifically according to factors such as regulation, contracting habits, the share of imports, liquidity or spot market size" (Böhme, 2014, p. 60).

By using these distinctive features of the gas market, Russia increased the prices for the EU market and the Commonwealth of Independent States (CIS)[20]. However, as the boom in production of oil and natural gas from shale formations became an important factor after 2008, prices dropped significantly, delivering a considerable blow to the Russian economy. For example, Russian gas prices at the German border fell by 30% in the third quarter of 2009 compared with 2008 (Stevens, 2010). In addition to unfair gas pricing for the regional European market, Russia's conflicts with the Ukraine and Belarus over energy transit and the controversial bilateral deals with EU states helped create an image of Russia as an unreliable energy supplier. "*The apparent use of Russian gas exports as a foreign policy tool […] suggests that geopolitical considerations motivate Russia's energy policy, which appears irreconcilable with the EU's attempts to depoliticise gas relations with Russia*" (Pick, 2012, p. 355).

It can be argued that the main path energy desecuritisation for Russia is along the same lines as that of securitisation – to enhance and sustain its domestic economic and political scene. One possible way for this to happen in the next decades is the progressive liberalisation of the energy sector, which would attract more foreign investors and strengthen Russia's domestic and international energy market in several ways. Firstly, there is a need for substantial investments in the development of new oil and gas fields and the construction of new pipelines or LNG facilities. Private investors are crucial to support such development in the energy sector, as proved by the Yamal LNG project, in which were Novatek owns a 50.1% stake, while Total S.A. and CNPC own 20% each and China's Silk Road Fund holds the remaining 9.9% (Yamal LNG, 2015). Secondly, by letting foreign, and especially European, investors who have the necessary know-how take part in energy projects would enhance energy productivity and improve the EU's image of Russia in

[20] CIS states are: Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Armenia, Moldova, Russia, Tajikistan and Uzbekistan. Georgia withdrew as a result of the Russo-Georgian War of 2008. And Ukraine, even as not a member, withdrew from its participation to CIS as a result of the Annexation of Crimea by the Russian Federation and Russia's involvement in the War in Donbass.

relation to energy. Thirdly, by allowing European investors to participate in the exploitation of Russian resources or the building of pipeline projects, such as the Nord Stream II, could restore – to a certain degree – the trust between Russia and the EU, at least in energy trade. In line with these ideas, Pogoretskyy argued that "*in order to support the financial viability of Gazprom, the Russian government had to reassess its energy pricing policy, and currently plans to converge export and domestic gas prices by 2014*" (Pogoretskyy, 2011, p. 189). However, the reality is different, as is clear in the following tables. The average price of gas exported to Europe in 2017 was more than 200% higher than the price within Russia.

Table 3: Average gas selling price in Russia and in Europe (net of the VAT, including excise tax and customs duties)

Currency	Year ended 31 December									
	2013		2014		2015		2016		2017	
	Russia	Europe	Russia	Europe	Russia	Europe	Russia	Europe	Russia	Europe
RUB/1,000 m^3	3,265	12,138	3,507	13,487	3,641	15,057	3,816	11,763	3,808	11,671
USD/1,000 m^3	102	381	91	349	59	246	57	176	65	200
EUR/1,000 m^3	77	286	69	265	54	222	52	159	58	177

(Gazprom, 2018a), (Gazprom, 2018b)

Even though the necessary changes are difficult to make in a short timeframe, little progress has been made. In 2014, average gas prices were 272% more expensive in the EU than in Russia, and this difference had reduced only to 206% in 2017. Russian socio-economic structures are difficult to handle, and a sudden large increase in domestic energy prices could have a large impact on Russian households and industry that could lead to intense protests or even revolts, and further securitisation. Current Russian President Vladimir Putin has demonstrated "*a growing ability and willingness to use energy as a political tool in order to pursue its political and geopolitical goals [...and] strengthen its international position*" (Godzimirski, 2009, p. 181). "*This appears to be part of a worldwide trend towards a re-nationalization and politicization of energy*" (Metais, 2013, p. 10). Is Russia using energy as a strategic interest? Yes, they are using their energy potential, a researcher from FNI argues.

"*On the other hand, if you use too much of the resources too soon, you end up doing absurd things. But Gazprom is a commercial actor and it's very difficult to know their intentions. They are both political and commercial*" (Senior research fellow (ii) at FNI, 2018).

7.6 Maintaining Energy Desecuritised Within the EU

The role of natural gas in the energy mix of the EU has been highlighted since the early 2000s. "*Natural gas is becoming an increasingly important component in Community energy supply, and, as indicated in the Green Paper 'Towards a European strategy for the security of energy supply', the European Union is expected in the longer term to become increasingly dependent on gas imported from non-EU sources of supply*." (European Council, 2004). Between the 2006 and 2009 disruptions, Barroso stressed again the relationship between energy and environmental security. "*Energy is not an issue in itself; it has an impact on other sectors: If I am asked today what is the most important issue for global security and development, the issue with the highest potential for solutions but also for serious problems if we do not act in the right way, is energy and climate change. Energy today is not only considered as a major challenge from an economic point of view but precisely for its implications for environment and climate. Because of increased competition for scarce resources, it poses serious concerns for global security… It is the great challenge of our generation*" (Barroso M. J., 2007). Also crucial is that the EU admitted that the disruption was not only caused by gas shortages but also by insufficient interconnections between its member states, especially in Central and South-Eastern Europe (European Commission, 2009). According to Maltby (Maltby, 2013, p. 441), the European Commission managed to couple this problem (lack of interconnection and insufficient policies) to a solution for energy insecurity that had already been circulating: further internal market integration and diversification of supplies. For that reason, it has been argued that "*While America had the shale gas revolution, Europe had the 'quiet' gas revolution through the reverse flow system, interconnectors.*" Whereas the old interconnectors operated by transferring natural gas only forwards, new natural gas interconnectors can reverse the flow backwards so that the gas can be transferred to another EU country if needed. "*Additionally, there are 15 new LNG terminals in the EU*" (European Official on Energy Security, 2017).

The EU is trying to keep energy issues desecuritised by developing a European energy policy, yet EU institutions have only limited power to control external energy policies of the member states. "*The Energy Union is trying to set a common framework. A framework about Regional level capacity with nearby countries. Promote Regional cooperation and a single voice at energy security*" (European Official on Energy Security, 2017). In some instances, bilateral agreements between Russia and EU member states are weakening the efforts of the EU to develop a robust mutual energy policy and can create disputes with other member states. The lack of a robust European energy policy makes it much easier for Russia to promote its interests at the bilateral level. In response to the 2009 crisis, the Third Energy Package was established, giving almost three years to the member states to strengthen the internal EU market, but this was not very effective for regulating energy relations with external suppliers (Politt, 2008) & (Pielow, 2009). Building on the Third Energy Package, the EU presented the Energy Union Strategy in 2015, a European Commission project designed to co-ordinate the transformation of European energy supply. The project was launched in February 2015, aiming to provide unhindered, sustainable, competitive and affordable energy to member states. According to the Energy Union (2015), the five main aims of the EU's energy policy was to:

1. Ensure the functioning of the internal energy market and the interconnection of energy networks.
2. Ensure security of energy supply in the Union.
3. Promote energy efficiency and energy saving.
4. Promote the development of new and renewable forms of energy to better align and integrate climate change goals into the new market design.
5. Promote research, innovation and competitiveness.

Finally, article 194 of the Treaty on the Functioning of the European Union (TFEU) makes some areas of energy policy a shared competence, signalling a move towards a common energy policy. Nevertheless, each EU member state maintains its right to "*determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply*" (Gouardères, 2018).

It could be argued that the more coherent the common energy policies become, the higher the chances of energy desecuritisation. This was pointed out by Hadfield and Young in 2008. "*The main balance to be struck must, therefore, be an internal consensus between market and geopolitical requirements in which a hybrid policy is not only acceptable but indeed, presented as the only real solution to a host of externally-derived issues (not least migration and energy security)*" (Hadfield & Youngs, 2008). A mistake that the policymakers of the EU make is to focus too much on the security of supply and ignoring the security of demand that energy-producing countries – such as Russia and Norway – are concerned about. "*Security of demand is of vital interest to the producer countries, which has to be acknowledged. EU security of supply would, thus, benefit from the further development of the multilateral producer–consumer cooperation in the International Energy Forum*" (Correlje & van der Linde, 2006, p. 541). Although the development of some intergovernmental bonds could help towards the desecuritisation of energy between the EU and Russia, the events in Crimea did not help for this to happen. The last publication of the EU evaluated the challenges that the EU and the member states must address as the Union advances towards its 2020 and 2030 energy and climate targets. As the report argues, "*Completing the Energy Union requires close cooperation between the Commission, Member States and all segments of society*" by mobilising "*all of society - citizens, cities, rural areas, companies, academia, social partners - to take full ownership of the Energy Union*" (European Commission, 2017, p. 1). Moreover, the report refers to the Nord Stream II project as an example of building up "*a strong mandate, on the basis of which the Commission stands ready to start negotiations with Russia. The recent proposal for an amendment to the Gas Directive clarifies that pipelines to and from third countries are subject to the common rules for the internal market in natural gas up to the border of Union jurisdiction. International agreements with the third countries concerned will remain the most appropriate instrument to ensure that there is a coherent regulatory framework for the entire pipeline.*" (European Commission, 2017, p. 15).

7.7 Possibilities of Energy Desecuritisation through International Relations

When trying to explain and change the present and the future, it is worth looking at the past. For the energy complex between the EU and Russia, we can look at the late 1970s and

the energy co-operation in the middle of the Cold-War. When West Germany and France were planning to build a pipeline from West Siberia to Central Europe, Ronald Regan, US President at the time, said "no, you cannot make a trade with your enemy[21]". But these countries argued that "it is just energy cooperation, we need this energy, and we are going to do that". The first pipeline was built in the late 1970s to early 1980s[22], and the co-operation worked well. The Soviet Union already had a similar co-operation with Finland, so they knew how to do it. The co-operation was not politicised, it was merely trading between two European countries and the Soviet Union. Given that this co-operation was established during the Cold War and was possible because it was not politicised, a similar co-operation could happen again.

The pipeline constructed as a result of the Cold War co-operation is the same pipeline that was at the centre of the recent conflicts between the EU, the Ukraine and Russia. One of the interviewed experts pointed out that

"*The first time that Russia closed the pipeline and gas stopped flowing to Central Europe was because Ukraine took their share and didn't let it go [to Europe] while Russia said that Ukraine had to pay for its share before [Russia] could supply more. Russia said that it was only sending [gas] because of central Europe but, as Ukraine is in between, they took [the gas] because of their needs/dependence and the issue was politicised by media in the European Union countries. It was not totally fair to Russia because Russia was only asking Ukraine to pay for the energy that [Russia] had already given to them. The Ukraine debt to Russia was huge because of energy. But in the EU, they were saying that Russia is not a reliable energy supplier just for this one case, which was too politicised, and the reasons were in trade not in politics. We have to understand: [any] supplier would do that (the same) if the price of energy was not paid. You cannot continue a partnership if not all the partners are not doing their part, fulfilling their commitments*" (Professor on Arctic Politics, 2017).

Another interviewed expert made similar comments, arguing that, in general, the political class in Europe exaggerated the issue so it became part of high-level politics and geopolitics.

[21] The Soviet Union
[22] The Urengoy–Pomary–Uzhgorod pipeline

The interpretation was that Russia had used its energy as a geopolitical weapon because the Ukraine was not loyal to Russia or because the Ukraine paid domestic prices and, with the liberalising of prices, the prices went up in Russia, domestic prices went up, and the Ukraine was paying less. Consequently, Russia was subsidising a regime that was not considered loyal.

"*I don't think it is fair [for this issue] to be politicised, but it is politicised in the west for domestic political reasons, justification of ideologies, and the ideology of diversification of supply, as we are relying too much on Russia, we have to curtail them*".

According to the same academic, Norway is different as it is considered part of the EU and there are a lot of institutions that can mediate discussions between Norway and the EU. Natural gas and pipelines from Norway have never been politicised (Senior lecturer of human geography, 2017).

Co-operation based on equal partnership is believed to be the way to encourage Russia to promote liberalisation of the energy market (Closson, 2009, p. 100). The energy policies of Russia have four major objectives. First, the efficient use of natural energy resources. Second, use of the energy sector to ensure sustainable growth of the economy. Third, to improve quality of life for the country's population. Fourth, to strengthen its economic position abroad. Accordingly, several challenges need to be overcome to achieve these objectives by 2030. First, to enhance the efficiency of extraction, production and processing of fuel and energy resources to meet domestic and external demand. Second, to modernise and create new energy infrastructures based on large-scale technological upgrading of the energy sector of the country's economy. Third, to facilitate a sustained favourable institutional environment in the energy sphere. Fourth, to raise the energy and ecological efficiency of the Russian economy and energy industry through structural changes and embracing technological energy conservation. Fifth, to raise the energy and ecological efficiency of the Russian economy and energy industry, also through structural changes and embracing technological energy conservation. Sixth, to further integrate the Russian energy industry into the global energy system (European Commission, 2013, p. 32). Moreover, the International Finance Cooperation (IFC) has pointed out that annual energy loss as a result

of inefficient energy use by Russia is equivalent to the annual primary energy consumption of France. Achievement of full energy efficiency in Russia could save 45% of its total primary energy consumption, which translates into 240 bcm of natural gas, 43 mtoe, 340 billion kWh of electricity and 89 million tons of coal. (IFC, 2014, p. 5). The saved energy could strengthen oil and gas exports and deliver environmental benefits.

In September 2011, the Commission published a Communication on security of energy supply and international co-operation: 'The EU Energy Policy: Engaging with partners beyond our borders'. The policy identified major aspects of long-term co-operation between Russia and the EU, such as the uniquely important role of Russia in Europe's energy market, the importance of the two energy markets converging, the need for a new and strong legal base and the need for the 'EU–Russia Energy Cooperation until 2050 Roadmap' to identify opportunities for long-term co-operation. (European Commission, 2011), (European Commission, 2013, pp. 32-33). Nevertheless, the EU–Russia energy dialogue has not been enough to completely desecuritise the energy trade between Russia and the EU. Political and security considerations among EU's member states and Russia remain, especially in relation to gas projects. On the contrary to the argument that "…*a functional global energy market could solve the problem of energy insecurity*", many researchers – including one interviewed expert– argue that

"…*the decisions of pipelines are political. They are inherently political decisions. If you leave it to the markets, you might have the cheaper but not the best options. It is not a 'free' market and decisions have impacts. The importance of politics in energy cannot be underestimated [because] energy defines jobs, budgets, societies, army capabilities and many more."* (Senior researcher at the Arctic Institute, 2017).

As stated by another academic, *"Pipelines have a political background*" (Associate fellow at FNI, 2018). Another interviewed academic argued that *"the NS II epitomises the dependency of Russian gas. Gas is a political component. If you lose transit you lose your political strength. Within energy security, there is a political framework"* (Senior researcher at FNI, Semi-structured Interviews, 2017). Nevertheless, increased interconnectivity within the EU and the new LNG terminals have mostly mitigated the problem of pipeline securitisation.

Energy securitisation between the EU and Russia remains a possibility as both sides try to diversify their energy imports and exports respectively. EU sanctions placed on Russia as a result of the Crimea annexation do not improve relations. For example, "*huge investments in the Arctic need cooperation and stable atmosphere. Even Russia understands that. And the sanctions have long-term implications. Even if they are lifted, they could be imposed again, and this creates a long-term uncertainty, very negative for development. The revenues have a 30 – 40 years' perspective and they need western companies on that. Political stability is very important. Oil price, of course, is very important for developments, but also the breaking point is coming down*" (Senior researcher at FNI, 2017). The EU are increasing imports of energy from other suppliers, such as LNG from the USA and Qatar and oil and gas from central Asian and Caspian states, and production of gas by Norway reached a record in 2017 and covered 25% of the EU's gas demand, more than 120 bcm (Norwegian Petroleum, 2018). Simultaneously, Russia is struggling to enter the Chinese market as part of an attempt to diversify its exports that involves building Nord Stream 2 (to Germany), Turkish Stream (to Turkey and Greece) and Power of Siberia (to China). Even if an agreement on price can be reached between Russia and China, "*increased Russian gas sales to China* [could] *shift more of its exports away from Europe, but the impacts are far from dramatic*" (Aune, Golombek, Moe, Rosendahl, & Le Tissier, 2017, p. 130).

The best concluding argument for the current situation between the EU and Russia is that they both have "*a common interest in supporting further integration of European markets, although for somewhat different reasons. Russia wants to sustain, or increase, its exports to Europe, whereas the EU wants to make sure that the market functions well and that no country becomes vulnerable to pressure from Russia"* (Aune, Golombek, Moe, Rosendahl, & Le Tissier, 2017, p. 111). Securitisation and extraordinary measures could escalate the tension between the EU and Russia in the context of energy flows. Stegen argues that the policies of the EU to move towards a single energy market and promote diversification, help to minimise the intimidation and the impacts of any potential supply disruptions (Stegen, 2011, p. 6512).

7.8 Reflections

The energy sector remains mostly desecuritised within the EU with respect to military evolvement and fast-track policies. Several attempts have been made to take exceptional measures towards energy security, but few have moved the issue from the policy agenda to the security agenda (Youngs, 2009). Given that securitisation is easier to achieve through a speech act than is desecuritisation, it could be argued that desecuritisation can be achieved through less speech but more actions to make the referent object secure from the existential threat. In the case of the EU, critical energy infrastructure and diverse energy suppliers could improve energy security of the EU states and their citizens.

Nevertheless, the EU framework is asymmetric, and each member state has different capabilities to "*influence the evolution of an individually proposed meaning into a collectively held representation*" (Spitzel, 2007, p. 369). The securitising and desecuritising actors have encapsulated within words the meaning of whom "*is socially framed and shared by all the members of a specific society*". At the same time, these actors are negotiating security threats to the audience using symbols understood by all the members of the specific society (Balzacq T. , 2002, pp. 475-477).

The securitisation of energy within Russia, together with the sanctions that resulted from the situation in Crimea complicates the issue of energy between the EU and Russia. Although complete desecuritisation seems to be beyond the bounds of possibility, it is not totally inconceivable because EU member states and Russia depend on each other for energy flows. For Russia, the EU market is of great importance because the revenues from sales are much greater than those from the domestic market, the CIS market or even the Chinese market. For the EU, most imported energy comes from Russia, whose disputes with transit countries have threatened to disrupt supplies in recent years (Eurostat, 2018). Concerns about the security of supply from Russia were further stressed by the conflict in the Ukraine. Moreover, 27% of uranium delivered to utilities for the production of nuclear energy in the 28 EU member states originated from Russia (EEA, 2017). Given that the energy security strategy of the EU focuses on security of supply and that of Russia focuses on security of demand, the two parties produce energy policies regardless of the other's

interests in energy security. The outcome is ongoing diversification rather than a mutual understanding that could foster better relations and enable development of early warning mechanisms and agreements that diminish the risk of shortages.

Within Russia, energy desecuritisation could be achieved by liberalising of the market and allowing European investors to be involved in its energy sector. This solution seems difficult to achieve because the monopolies held by Gazprom and Rosneft are not predicted to end in the foreseeable future. TOTAL is the only considerable EU partner in YAMAL LNG, but sanctions prevented co-operation between EU and Russian firms for unconventional or deep-water Arctic energy sources. Within the EU, confidence in the gas market has built through price convergences, transparent and affordable pricing and the availability of alternative sources and routes. Along with this confidence came desecuritisation and, in some respects, depoliticisation of energy. This desecuritisation is beneficial for energy and environmental security, as countries are becoming more confident to switch to gas from coal (Bochkarev, 2017). The Russian program for Energy Saving and Energy Efficiency Improvement up to 2020 confirms the will for improvement of energy efficiency, and this could form grounds for co-operation between the EU and Russia. However, owing to sanctions from the EU and USA, new infrastructure to co-ordinate energy efficiency management and monitor resources has been postponed (Finpro, 2014) & (Aalto P., 2016). In conclusion, even though Russia has not made a substantial effort to desecuritise the energy sector, the EU and the international community have moved towards a more diversified market, which includes Russia. As a result, the progressive absence of energy from the security and even the political agenda has led to the topic of energy being almost completely desecuritised among the EU member states.

My findings highlight that a desecuritised energy sector could benefit not only the economy, but also the environment and the populations of the involved actors, within a context of contemporary western way of thinking. They also point out the inter-relation between critical energy security theory and the application of this theory to the EU as an institution, its member states and their major suppliers, Norway and Russia. The next chapter focuses on the developments and the uniqueness of the Barents Region, which binds together the EU, Norway and Russia.

Ultimately, security serves a descriptive and normative purpose in my research. Descriptively (and in the Copenhagen School of international relations), securitisation is a problem in the energy sector and needs to be overcome through desecuritisation or, preferably, avoided to happen at all. Normatively (and in the context of the Welsh School of international relations), thinking about energy in relation to security could have positive potential by emancipating states, communities and individuals from energy insecurities.

Chapter 8

Inter-relationships among Norway, Russia and the European Union

8.1 Introduction

In the previous chapter, critical security studies and their application to energy security of the European Union were analysed and best practices were proposed to maintain a desecuritised energy sector. Also, the complexities of energy securitisation and desecuritisation between Russia and the EU were scrutinised to create a clear picture of energy, environmental and political concerns between the two actors. This chapter considers the significance of the Barents Sea in the relations among the EU, Norway and Russia. I focus on my selected geographical area of interest and how the region creates bonds between these three actors in relation to energy. The research question that I will scrutinise in that chapter is:

- To what extent do the energy reserves of the Barents Region create inter-relations among Norway, Russia and the European Union?

The Barents Region is an interesting example of co-operation between the EU, Norway and Russia. Despite tensions between Russia and the EU and between Norway and Russia at the general political and even military levels, co-operation among them in the Barents Region is significant. Many academics and policy makers are concerned about the energy security of the EU, which is a security of supply. The security of demand, which Norway and Russia are concerned about, is often neglected and translates to a predictable and steady market for their exports, allowing further investment. In this chapter I examine the dynamics between the energy reserves of the Barents Region and the EU's energy mix. After the 2007 hype of Arctic fossil fuels reserves, important aspects of the Barents Sea beyond its energy reserves become clearer, including maritime transport and fisheries management. I also analyse these aspects. Considering that Norway, which belongs to NATO, and Russia share a land border of over 100 km and a maritime border of over 800nm, instead of looking for military and hard security features, I again perform my analysis from the perspective of critical

security in order to stress the importance of aspects such as energy, environmental protection and political deliberation.

8.2 Enhancing the Energy Security of the EU from the Barents Region

The great concern of the EU in relation to energy is the security of energy supply, the unhindered and affordable delivery of energy. However, security of demand is an important component of energy security for energy-producing nations. Security of demand was on the agenda driven by Russia at the G8 meeting in St. Petersburg in 2006, and it became more prominent in subsequent energy discourses. Russia emphasised the security of demand as much as the security of supply because energy production requires expensive infrastructure, so they need to ensure they have reliable partners at the other end of the pipeline (Russian academic expert, 2017). An interviewed expert of global energy also pointed out that the EU is fixated on the security of supply and does not deal with the final issue, which is the security of demand.

"*So, what they are doing is asking the industry to invest in an infrastructure while that industry is not certain about the future level of demand. Why invest in new pipelines if they are being told that 'by 2030 we won't need any of this gas because it is a fossil fuel'?*" (British Professor on global energy, 2017).

However, a senior research fellow at Fridtjof Nansen Institute FNI argued that,

"*the security of demand is not that important, as the EU is an import actor, and all are aware of it. What matters most is that the energy security of the EU is a shifting agenda and they (the EU) need a shifting agenda as different states have different needs*" (Senior research fellow (ii) at FNI, 2018).

He also made clear that the European Energy Union is not stronger than the political Union,

"*It is a political project to promote an energy policy. Political union comes first and then the energy. Energy is market projects and then political issues. Energy union is a political (free*

trade) and market (open market) issue. The political issue is to remove the barriers from trade. There are also political divisions; for example, it is hard to find agreement on energy when there are cleavages on other issues like migration" (Senior research fellow (ii) at FNI, 2018).

No industry can develop without secure investments so, accordingly, investments in LNG terminals, pipelines and interconnectors have to be supported by policies that promote natural gas as a cleaner fossil fuel that the EU could use to tackle climate change. The EU is a major importer of natural gas, but each member state may follow different paths towards the reduction of CO_2 emissions. An energy trade without barriers and that is disconnected from other political frictions, such as migration policies, could help every member state to fulfil its goals related to energy and environmental security.

Two distinct descriptions highlight that there is a paradox in relation to the Arctic from an EU viewpoint, and that 'security' can be considered in negative and positive terms. The first is that the Arctic is a climate 'hot spot' and zone of instability, and second is that the Arctic is a zone that could enhance European energy security. Climate change has brought the Arctic into the foreground due to an assumed struggle between states to control newly opened sea waters. This assumption has been used extensively in the development of the Arctic policy of the EU. Crucial years for the re-emergence of the Arctic in the global arena in the 21st century were 2007 and 2008. In 2007, we observed the minimum extent of sea ice to date and the Russian flag was planted in the seabed at the North Pole. In June 2008, the USGS published the 'Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle', which was used extensively in the EU's communications in 2008 and 2011; despite the fact that it is mentioned that the future of oil and gas exploration and exploitation could be a longstanding venture (Raspotnik A. , 2018, s. 149).

According to a Finnish Professor of Arctic Politics,

"*Of course, there are threats and risks to the energy security of the European Union. But how much these risks/threats are geopolitical or geo-economical? We have to emphasise the latter*" (Finnish Professor on arctic politics, 2017).

The same argument is made by EU officials as well.

"*There is no risk of infrastructure per se. Only geopolitical and geo-economic issues of energy transportation*" (European Official on Russian affairs, 2017).

Digital security for energy infrastructure has also been mentioned by a senior researcher at FNI (Senior research fellow (ii) at FNI, 2018).

It can be argued that the Arctic is likely to become a key factor in the EU's strategic relations with Norway and Russia in terms of environmental and energy policies and environmental impact assessment policies. The EU is open to all geographic areas with energy, such as the Eastern Mediterranean. In each region, there are different opportunities and conflicting interests. Despite the fact that different European actors have diverse interests in energy, a consensus can be observed among big actors/countries. As an interviewed Finnish Professor said,

"*Is there a potential of securing the energy demand of the EU with Arctic reserves? Yes – if you have the option, you have the potential. Even if it never materialises, it is there*" (Finnish Professor on arctic politics, 2017).

The numerous policy acts published by the EU regarding Arctic policies are missing the Russian factor. This is strange, as there are dependencies at the economic and resource level for both actors, connections on research and funding, cross-border co-operation through the North Dimension[23] and very good relations between Russia and institutions in the European Arctic. The reason could be that Russia is quite constructive within the European Arctic co-operation but rather adverse in the wider circumpolar structure (Raspotnik A. , 2018). Accordingly, Russia has been characterised as unco-operative in relation to the role of the EU within the Arctic and it generally prefers to work with member states alone rather than the EU. Similarly, Russia has also been criticised for being

[23] The Northern Dimension is a joint policy between four equal partners - the European Union, Russia, Norway and Iceland - regarding the cross-border and external policies geographically covering North-West Russia, the Baltic Sea and the Arctic regions, including the Barents Region. The ND Policy was initiated in 1999 and renewed in 2006 (EEAS, 2016).

unapproachable for sustainable development discussions. Moreover, Jonathan Oldfield has argued that in Russian environmental issues, there "*…remains a marked gap between rhetoric and the concrete implementation of the stated politics",* probably "*…echoing the situation during the Soviet period*" (Oldfield, 2016, p. 81). In 2016–2017, the Arctic has been highlighted as a positive opportunity for careful engagement with Russia in an otherwise tense relationship. Nevertheless, as Depledge and Tulupov argued, "*Limited cooperation between the EU and Russia, the broader stalemate, including Russia's position on the Union's pending AC observer status, may not end anytime soon*" (Depledge & Tulupov, 2016).

Norway is not officially part of the EU but is not separate from it (Keil & Raspotnik, 2014, s. 104). Increasing engagement of the EU with the Arctic has mostly been received positively by Norway (Norwegian Ministry of Foreign Affairs, 2012, s. 32) & (Støre, 2011, s. 59). Norway co-operates a lot with the Commission on Arctic matters and had a strong influence on the 2008 communication and the 2014 resolution (Wegge, 2012). The 2008 and 2012 communications stressed the role of Norway as a reliable energy supplier and that the EU was interested in development of inter-related resource policies and envisioned strengthening of the bilateral collaboration in relation to the Arctic – the high-level Energy Dialogue. However, an actual European Arctic has, in that respect, never actually materialised (Raspotnik A., 2011) & (Raspotnik A. , 2018, s. 147).

Two interviewed researchers commended on the role of Norway in the EU energy sector,

"*Norway is not on the EU table, however, is paying, as they can influence so much the EU policies, including energy policy. That is exactly because Norway has something that the EU doesn't have – energy resources. So, the Arctic policies of Norway and of Russia have impact on the EU's energy security but a bit more on the EU's policy on the Arctic*" (Finnish Professor on arctic politics, 2017).

"*Indirectly, Norway and Russia influence the energy strategy of the EU very much. Gas security means to counteract the Russian dominance in the market by diversifying from Russia and using more LNG. As Russia is not perceived as a very democratic state, Norway is*

trying to tell Europe to trust Norway as a supplier but there is a matter of prices. Are they affordable?" (Senior research fellow (ii) at FNI, 2018).

Norwegian officials have a different opinion though, as they argue that Norway does not have a significant influence on the EU energy strategy in terms of consultation and greener energy solutions. There were expectations of greener energy and, although natural gas is a very clean fuel (compared with oil and coal), the gas market is not booming (Senior researcher at FNI, 2017) & (Norwegian energy consultant, 2017).

In Norway, the Arctic/North has a very significant role in the national perception of being 'Northerner' (Keil, 2013). Consequently, since 2005, the so-called 'High North' narration aims to form a discrete Norwegian 'Arcticness/Northernness' that is a necessary part of Norway's national identity and its role within the world (Norwegian Ministry of Foreign Affairs, 2006), (Jensen & Hønneland, 2011), (Jensen L. , 2012a). Despite the successful entrepreneurship policy of Norway, demonstrated by its leadership at the Arctic Council and its prosperous economic welfare, the country is preoccupied with a small-power set of symptoms, as it borders a predominant state at the northeast (Exner-Pirot H., 2011, p. 19) & (Aalto P. , 2013, p. 110).

For Russia (and previously the Soviet Union), the Arctic is a pivotal aspect of "*Russian national identity and conceptions of security and sovereignty*" (Wilson Rowe, p. 2). This internal significance primarily relates to Russia's legacy of Arctic exploration and the associated goal of constructing a Northern identity supported by the "*conquest of the North"* (Baev, 2007), (Wilson Rowe & Blakkisrud, 2014). Now Russia seeks to create a geographically definite strategy for the Arctic within its domestic affairs, while it refuses to accept any external interventionism and collaboration at the global [Arctic] arena (Knecht & Keil, 2013, s. 181).

The importance of the Arctic is now evaluated largely on the basis of its natural resources, but it can be argued that the original value of the region related more to strategic and symbolic meanings. The EU considered itself insecure because of alleged instability at its northern boundaries, fuelled by climate change with international consequences. Given that

the Earth's climate system is controlled greatly by the polar regions, local and international issues in the Arctic are inseparable, leading to a demand for pivotal action at a world level (Borg, 2009, s. 2). As the former Norwegian foreign minister Jonas Gahr Støre argued, "*Geography is changing (due to climate change) – even though we cannot change geography*" (Støre, 2012).

Co-operation between the EU, Norway and Russia in relation to energy must be enhanced, avoiding unfair practices within the European energy market (Commission of the European Communities, pp. 6-9). It could then be argued that the EU considers the region to be market-friendly and wants to keep the doors open to energy trade. Therefore, energy dialogues among Norway, Russia and the EU are necessary in order to endorse the position of the EU (for example, European (technical) criteria or standards) and for the EU to stay up to date with Arctic developments. The European Parliament kept the same way of thinking of cooperation and further stressed the economic potential of the Arctic in 2011 and 2014 (Raspotnik A. , 2018, p. 150).

Given that the EU plays a principal role in the international governance of climate change, its integrity and validity were at risk because of the wrong perceptions that the EU had for the Arctic. The EU's first proposal for enhancing governance of the Arctic region – 'The European Union and the Arctic Region' published in 2008 – revealed uncertainty about the approach of the EU to the Arctic, which was presented in a mostly descriptive way. This first communication recognised the government structure of the region – the A5[24] and A8[25] states, the UNCLOS[26] and the Arctic Council – but doubted the efficiency and the capabilities of the local regimes, arguing that these could be assured if they were enhanced through a European booster. Moreover, it argued that only if the EU is involved in Arctic issues, together with the Arctic states, comprehensive stability could be achieved (Commission of the European Communities, p. 12). However, this European perspective was not received well in the Arctic Circle. From 2009 onwards, the term 'governance' was abandoned, and in

[24] The five Arctic states that have coastlines bordering the Arctic Ocean including Canada, Denmark/Greenland, Norway, Russia and USA.
[25] The eight Arctic States; Canada, the Kingdom of Denmark (including Greenland and the Faroe Islands), Finland, Iceland, Norway, Russia, Sweden and the United States.
[26] UN Convention on the Law of the Sea (1982)

the 2012 EU joint communication it was replaced with 'co-operation' (Raspotnik A. , 2018, s. 151).

Annexation of the Crimean Peninsula by Russia in March 2014 led to the EU imposing sanctions on Russia. Elements of the sanctions affect Russian Arctic development, as products for Arctic oil exploration and production in Russia are prohibited from exportation (Council of the European Union, 2014). This conflict, which has been ongoing for more than four years, is the major reason that the EU has not yet acquired observer status in the Arctic Council,

"*The US and the EU tried to put some boundaries on Russia and give them indications but at the same time they don't want to hurt their own interests. And in the Arctic, the decision has been made; we will compartmentalise the Arctic from Russia's other actions like Crimea or Georgia*" (Canadian academic expert, 2017).

False impressions about hydrocarbon reserves, minerals, maritime transportation and fisheries, along with increased global awareness of the region, created hype around the future of the Arctic. Energy specialists argued for a patient approach to Arctic energy, particularly as energy prices were set to increase in the near future (Nilsen T., 2014). Over the past 20 years, various opinions have been put forward that envisaged a "golden" economic Arctic future. Undoubtedly, this image of Arctic resources, maritime transportation and fisheries demonstrated that the region has global potential. For this reason, the final decision of if and when to take advantage of that potential does not rest only with Arctic stakeholders; on the contrary, it is an international economic decision based on practicability, cost-effectiveness and socio-ecological willingness (Raspotnik A. , 2018, p. 57). As Andreas Raspotnik has precisely argued, it is not about *when* the Arctic will become economically relevant on a global scale, but rather *if* (Raspotnik A. , 2018, p. 57).

On further scrutiny of the energy security of the EU, diversification seems to be a core strategy, advocated by many parties, such as EU officials, who argue that the main European strategy is the diversification of everything by using alternative suppliers and fuels and routes,

"*One of the major keys for European energy security is to increase energy production in the EU and diversify supplier countries and routes. This includes further deployment of renewables, sustainable production of fossil fuels, and safe nuclear energy where this option is chosen. It also entails negotiating effectively with current major energy partners such as Russia, Norway, and Saudi Arabia, as well as new partners like countries in the Caspian Basin Region*" (European Official on Energy Security, 2017).

The same points have been made also from a European official on Russian affairs (European Official on Russian affairs, 2017). This argument is backed by academics as well,

"*…as one recipe could be to have sufficient infrastructure to have a diversity of access to multiple sources of supply in a market system*" (British Professor on global energy, 2017). Norway's view is that a well-functioning, integrated energy market is the single most important contributing factor to security of supply in Europe. This includes a strong emphasis on infrastructure development as well as diversified supply sources, as diversification, in combination with efficient gas storage, always leads to cheaper and better terms. The EU could follow a policy of diversification in order to maximise its energy security (Norwegian Ministry of Petroleum and Energy, 2017).

To maximise its energy security and resilience, the EU must keep all options open, including supply routes, energy efficiency, and reduction of consumption. The option of renewable resources relates to the manufacturing and technology industries, which are therefore actors that influence policy. Diversification is the main target, but the focus differs for different states. For example, in 2011, Poland imported 10.3 Gm^3 of natural gas, 86% of which came from Gazprom, and Lithuania imported 3.2 Gm^3 of natural gas, 100% of which came from Gazprom, whereas France imported 8.5 Gm^3 of natural gas and only 18.2% came from Gazprom. Other significant actors that influence diversification are the big energy consumer companies, big energy selling companies and big manufacturers. In addition, interconnections between European countries are crucial, but political issues affect funding. One other controversial issue in the EU energy market is that prices of energy differ between EU countries (Senior research fellow (ii) at FNI, 2018). Norwegian natural gas from

the Barents Sea could help to reduce dependency on from Russia, especially for countries that depend entirely on Gazprom.

The Nord Stream (NS) II project has divided academics and policy makers within and outside of the EU, "*Even the NS II companies are arguing that NS II is a diversification," says one interviewed academic, "while at the same time, this has political implications as it deprives Ukraine of a substantial income. It is strange how that project came up*" (Senior researcher at FNI, 2017). There was opposition to NS II from Poland, Sweden and Baltic countries. "*There is not a coherent voice, not as much as Europe bureaucracy wanted*" (Russian academic expert, 2017). The initiation of NS II was an important political decision that has frustrated Norway, as they are trying to encourage an EU policy that commits to Norway's gas and enhances Norway's security of demand.

The NS II project is complicated in terms of commercial versus political interests as, "…*it is attractive commercially, but pipeline gas is now very politicised and inflexible, changing the geography. The political argument is that NS II is making the Ukraine unnecessary for Russian transport of gas, so they are losing the transition role and income; the same applies for Poland. They feel more vulnerable to Russia, as they are losing their transit 'weapon'. Also, the EU and US feel worried about the Russian pressure on these countries. The EU dilemma is that the EU will need big gas supplies from Russia but, at the same time, political relations between them are bad. It is not good to have a bad attitude towards your main supplier*" (Senior researcher at FNI, 2018).

Finally, it has been suggested that there is a contradiction between EU officials and academics. The officials argue that the security of supply is most important for the EU. On the contrary, the academic argument is that energy security encompasses more than the security of supply and that a problem in the science literature is a fixation on security of supply owing to poor understanding of the technicalities of how the gas market works and too much focus on the role of states. "*Structures have changed and are changing fundamentally and yet it seemed that we have this very old notion of what energy security is about*" (British Professor on global energy, 2017). Energy security is a combination of an

affordable and unhindered energy supply that is also environmentally acceptable, un-politicised and based on a free market economy.

8.3 The Role of the European Union in the Barents Region

The EU has European Economic Area (EEA) states and member states in the Arctic Council – Denmark, Finland, Iceland, Norway and Sweden – and also several observers– France, Germany, Italy, Poland, the Netherlands, Spain and, currently, the United Kingdom. So, "*from a geographical viewpoint, it is therefore unsurprising that the Arctic should appear on the EU agenda*" (Østhagen A., 2013, s. 74) & (Raspotnik A. , 2018). However, the EU does not have a shoreline on the Arctic Ocean (Koivurova, Kokko, Duyck, Sellheim, & Stępień, 2012, s. 361).

In 2008, the Commission referred to the Arctic for the first time, pointing out the regional challenges and opportunities and their potential effects on European populations (Commission of the European Communities, 2008, s. 2). As a result, a climate and environmental issues linked the Arctic and the EU (Commission of the European Communities, p. 3) and, as the Arctic could have adverse effects on Europeans, action from the EU was considered inevitable. For that reason, after that report in 2008, the stance of the EU towards the Arctic was security oriented. The notion of security was complicated, relating to securitisation of climate change and its impact as well as energy resources. Raspotnik argued that, in this case, "*both concerns and interests reflect geopolitics of dialogue and weakened reciprocity and not a one-sided emphasis on a hegemonic enforcement of interests, for example dictated via imposed ideologies only*" (Raspotnik A. , 2018, s. 152).

The only indigenous populations in Europe are the Sámi[27], which are the oldest ethnic group in the Nordic countries and on the Kola Peninsula. In today's arrangement of modern states, the land and the population of the Sámi are divided among Norway, Sweden, Finland and

[27] In the EU are also included the indigenous populations of Arawak, Palikur and Kalina, at the French Guiana which belong to the French Department and the Eurozone. Nevertheless, the Sámi are the only recognised indigenous population who live in the continental territories of the EU.

Russia (Baer, 2005, s. 247). It has been argued that the EU does not pay sufficient attention to its policies concerning indigenous peoples, as the most recent were published in 1998 (Airoldi, p. 81), (Neumann, 2010, p. 9). On the other hand, engagement of the EU with the indigenous populations of the Arctic, in legal terms, is part of various programmes that relate to animal welfare, environmental protection, development, trade, education, culture, regional policy and, most significantly, international human rights law[28]. However, just a few European measures are applied directly, such as Regulation 1007/2009, which bans seal products in the EU (Koivurova, Kokko, Duyck, Sellheim, & Stepien, 2010, pp. 37-9). This ban confirms the vague approach that the EU has towards the Arctic, highlights the robust legal, political and economic leverage of the EU, and demonstrates the fall in credibility and reliability of the EU, which hinders its advancement in the institutional governance framework of the Arctic (Scarpa, 2014, p. 459).

"*The EU acts mostly as an external actor given that EU law only directly applies to three of the eight Arctic states"* (Keil & Raspotnik, 2014, s. 117). This differentiates the EU's Arctic policies and related policies "*decisively from those for other sea-related regions, like the Mediterranean or Baltic Sea Region*" (Neumann, 2010, s. 12). Subsequently, it also depicts "*an unconventional internal/cross-border/external mix, in which the EU varies in competences, strengths and influence*" (Kobza, 2015, s. 4).

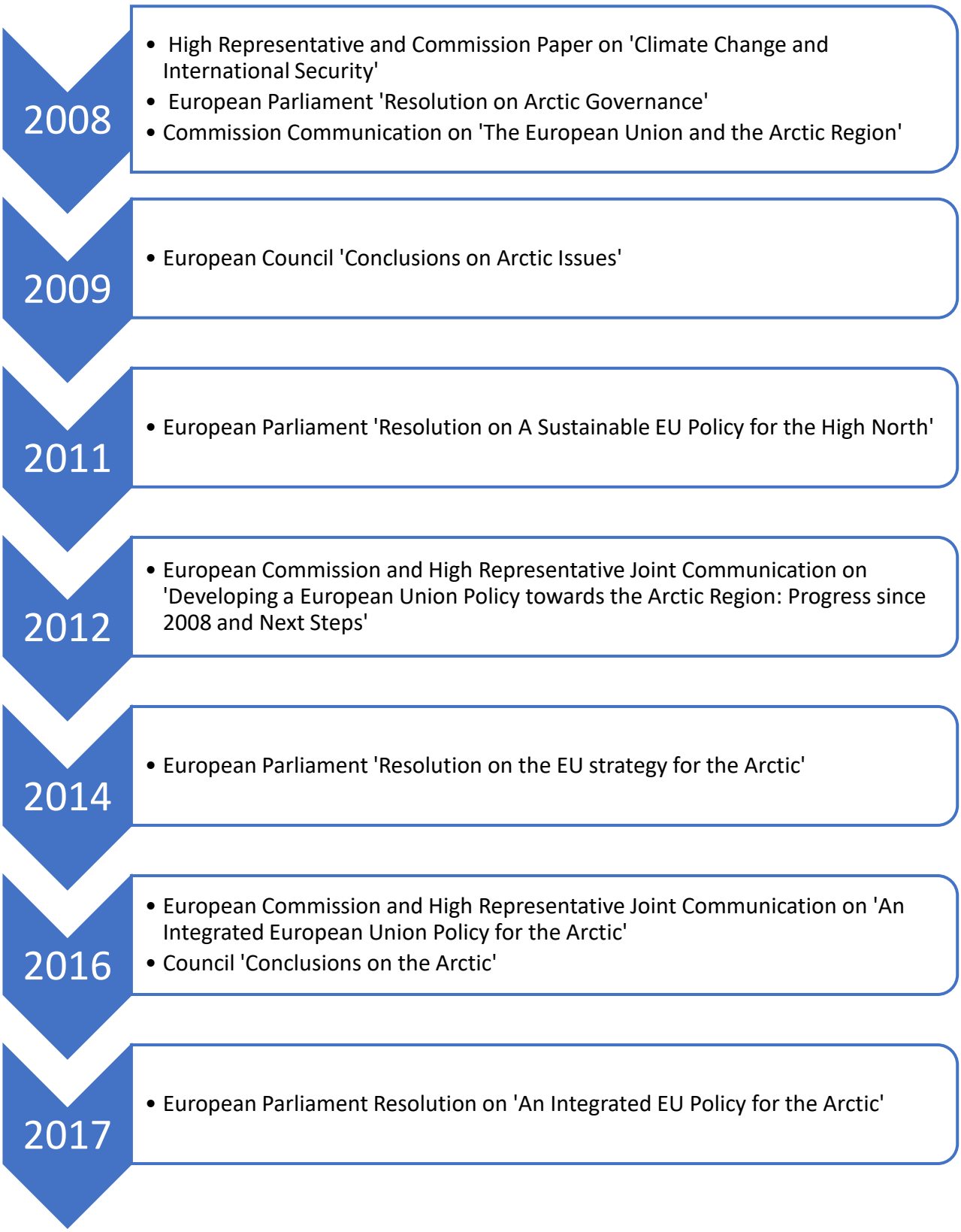
The EU has a strong economic presence in the Arctic, especially in the Barents Region. Even though dependencies and interdependencies between the EU and Arctic states have been in place for decades, the economic and market sectors hold significant potential for further expansion. In future, fossil fuels from the Barents Sea and various resources from Greenland would benefit the EU in various sectors, so the European Arctic has been described as "*the most significant part of the Arctic Region*" (Senior researcher at FNI, 2018). In particular, the oil and gas reserves in the Barents and Kara Seas could be the most significant element in the EU and Arctic linkage. As stressed by Norwegian researchers, the Norwegian Arctic is completely ice free (Associate fellow at FNI, 2018), making it different from the rest of the

[28] The EU strongly supported the adoption of the UN Declaration on the Rights of Indigenous Peoples in 2007 and focused widely on related acknowledgements within the EU, previous to the Declaration (Scarpa, 2014, pp. 438-439).

Arctic Ocean. "*There is no ice and there is a lot of maritime shipping*" (Senior research fellow (iii) at FNI, 2018). "*The Barents Sea is the easier part of the Arctic, as it is not ice-infested. It is still complicated, but the costs of exploration and exploitation are reducing*" (Senior researcher at FNI, 2018). However, the road from potential to reality is long. The Uncertainty about an Arctic economic boost in the near future is accompanied by the uncertainty of whether the EU would wilfully use its market influence to increase its economic influence on the (European) Arctic (Raspotnik A. , 2018, s. 79).

The socio-economic and ecological policies of the EU are very important for the Barents Region, as large-scale pollutants threaten the area. The 'EU Arctic Footprint and Policy Assessment Report' covers nine discrete policy issues: biodiversity, chemicals and transboundary pollution, climate change, energy, fisheries, forestry, tourism, transport and Arctic indigenous and local livelihoods (Cavalieri, et al., 2010). However, EU funds for northern territories are not strictly for Arctic regions but also for some neighbouring regions. It has been proved that the EU is an important funding body for the European Arctic Regional development during the last decades (Airoldi, p. 57). As the Commission put it "*the EU is a key investor in the Arctic*" (European Commission, 2014). Østhagen underlined that "*It can be argued that the EU is by all means an Arctic actor"* (Østhagen A., 2013, s. 86). Similarly, Bailes indicated that the stakes of the EU in the region do not "*stand or fall just on calculations of geostrategic [geographical] presence*" (Bailes, 2010, s. 220).

Figure 9: The EU's Arctic Policy Milestones, 2008-2017.



Source: (Raspotink & Rudolff, 2012, s. 11) & (Raspotnik A. , 2018, s. 93).

In October 2010, after the disaster of the Deepwater Horizon offshore oil-drilling rig in the Gulf of Mexico, the Commission issued a communication regarding the development of a legal framework to guarantee high safety standards for offshore exploration and production activities in EU and other countries. As the Arctic is environmentally sensitive with a harsh climate and untapped hydrocarbon resources, it was included as a place of particular attention (European Commission, 2010, s. 12). European policy makers need to "*build a particular position around different elements of a policy/regional challenge and …tie them together into an unambiguous and convincing narrative, thereby constituting a coherent policy problem with a coherent policy response*" in order to form an apparent European Arctic space (Jones, 2011, s. 42).

In addition, the commission called for international bidding rules to be developed for offshore drilling. After two years of debates on regulation of safety for offshore oil and gas exploration, the new Directive 2013/30/EU was formed (European Commission, 2013). However, backlash from Arctic countries against this regulation highlighted the sensitivities of the Arctic that the EU is vulnerable to. For example, stating that hydrocarbons and other Arctic resources must be exploited sustainably does not change the fact that the burning of fossil fuels goes against the climate change policy of the EU and is a paradox of Arctic development itself. If the EU were serious about its climate change policy, the Communication should have included a call to not exploit Arctic hydrocarbon resources but focus on the renewable energy potential of the region. This contradiction also partly explains why the EU does not want to be too involved in Arctic matters or provoke the Arctic states, so they let the impression of being a 'superior policy regulator' fade (Keil & Raspotnik, 2012).

The directive, which is also applicable to EEA members, was received with scepticism by the Arctic states, especially Norway (Nilsen T., 2012), as some MEPs were arguing for a ban on Arctic drilling even though the EU does not have the jurisdiction to do this (Nelsen, 2012). The directive also spelled out that the Commission "*shall promote high safety standards for offshore oil and gas operations at international level … including those relating to Arctic waters* (European Commission, 2013, s. 87). The proposals were not unfamiliar or bad, but apart from corroboration that the region is hydrocarbon-rich, the debate about exploitation

or preservation was vague (Østhagen A., 2012). Consequently, the presentation of unilateral legislation that affects the Arctic caused an outcry in Norway.

If the aim of the EU is a substantial theoretical and practical infrastructure for its communication with Arctic states on Arctic matters, it would develop a distinctive Arctic policy, an equivalent to the European Neighbourhood Policy in which the Arctic is identified as a region that neighbours the EU (Bailes & Heininen, 2012, s. 93), (Raspotnik & Østhagen, 2014). Instead, the Arctic policy of the EU "*remains a very diverse set of ideas, trying to reconcile contradictory values and interests*" (Stępień & Raspotnik, 2016, s. 397).

A European presence in the Arctic in relation to territorial, functional and policy-related issues has become accepted. Dodds described engagement of the EU with the Arctic as "*both territorial and relational*" (Dodds K., 2012, s. 22). Significantly, most EU policy documents consider the uniqueness of the Arctic but do not mention 'classic' security and defence issues. The only minor exception is the 2008 High Representative Commission Paper and the European Parliament resolutions. If the EU intended to establish a fully integrated Arctic policy, such hard security issues would be taken into account. Nevertheless, in 2016, the region was been described by the EU as a "*cooperative regional order*", giving the chance of selective collaboration with Russia (High Representative, 2016, ss. 33 & 38-39).

As the current energy perspectives of the Barents Region are fading, not only for the EU but also globally, the emphasis in the EU has moved towards different topics, such as climate change in the Arctic, Arctic governance and co-operation. This change of perspective could contribute to legitimacy of the EU's involvement in the Arctic. The two major aspects the EU must emphasise to enhance its multidimensional Arctic presence and increase the likelihood of accessing the Arctic Council are its environmental footprint and its supposed role as an international leader in the fight against climate change. "*The EU is doing something that nobody else is doing by having carbon markets. Huge industries have free allowances, in order to not leave their current countries or Europe in general. The energy companies are paying for the carbon allowances*" (Research Professor at FNI, 2018). This could minimise use of fuels that emit a lot of carbon, such as coal and crude oil, in the future.

It is clear then that the connection between the Arctic and the EU has become the Arctic research programmes funded by the EU. Therefore, if the "*dominant paradigm for framing Arctic security is climate science*" (Bravo & Rees, 2006, s. 205), the European process of establishing a geopolitical European Arctic space must focus on scientific methods and related processes, such as mapping, illustrating and surveying. In the summer of 2019, 11 projects[29] related to Arctic science were funded by the EU. "*These projects address a broad spectrum of research and coordination activities: the most up-to-date findings on permafrost and sea ice, enhancing observation to improve predictions, networking of research stations, coordinating access to icebreakers, building scenarios to help local communities adapting to the changing Arctic and more*" (European Commission, 2019). The 2016 communication defined the EU as a "*global leader in science*" (European Commission, 2016, p. 13) & (Raspotnik A. , 2018, s. 153). Depicted in a geographical point of view, Koivurova et al. sub-classified the legal–spatial influence of the EU into four dimensions:

- A core region (the northern parts of Finland and Sweden)
- An EEA region (Iceland and mainland Norway)
- A partnership/co-operation region in the European Arctic (Greenland and Russia, BEAC and the ND)
- An international region (with the EU's international regulatory powers being relevant and cooperation efforts taken at AC level).

(Koivurova, Stępień, & Kankaanpää, 2014, s. 76)

As for other regions that neighbour the EU, the concerns and contributions towards Arctic policy developments differ between the member states. These concerns vary from states that are naturally connect the EU with the Arctic (for example, Denmark, Sweden and Finland) to states that are significantly engaged (for example, Germany, France and Poland) and states that are sectorial (for example, the United Kingdom) or completely apathetic (Stępień, 2015, p. 277).

[29] APPLICATE, ARCSAR, ARICE, BLUE-ACTION, EU-PolarNet, ICE-AR, iCUPE, INTAROS, INTERACT, KEPLER and NUNATARYUK.

Attitudes towards the Arctic-related activities of the EU vary among of member states with an interest in the region, from solid approval (Finland, Germany and Sweden) to scepticism (Denmark and the UK). Nevertheless, the Arctic member states of the EU are in favour of the EU engagement to support the Arctic, and this can be seen clearly in the 2016 communication, which is closely aligned with the Arctic objectives of Denmark, Finland and Sweden (Stępień, p. 274) & (Stang, 2016, s. 9).In addition, the EU's application for observer status in the Arctic Council has been supported by all the member states interested in the Arctic (Raspotnik A. , 2018, s. 122).

To conclude, it could be argued that the Barents Region was initially depicted as the reservoir that could fulfil the future energy needs of Europe. However, the contemporary, sober analysis, influenced by results from exploration and environmental concerns, present a different picture. Arctic reserves, especially in the Barents Region, are fuelling the national economies of Norway and Russia because they are mainly exploited by state companies. The EU is shifting its priorities in relation to fossil fuel consumption, and its main goal is to be present in Arctic affairs that relate to environmental protection and safe maritime shipping.

8.4 Emerging Geopolitics Among the EU, Norway and Russia in the Barents Region

The term 'geopolitics' signifies several things and geopolitics comes in several forms. Critical geopolitics fundamentally seeks to 'unpack' these inherent certainties of the international political field and interpret decomposed, geopolitical practices and concerns (Raspotnik, 2018, p. 25). Two important events in the summer and autumn of 2007 led to the Arctic boom scenarios, leading to another layer of Arctic geopoliticisation. These events were the placement of the titanium Russian flag at a depth of 4 km at the North Pole, and a record low of the sea ice extent in the Arctic.

Since the beginning of the 21st century, both the Barents Region and the circumpolar north have been shaped into a peaceful co-operative space with minimal risk of war or armed

conflict. Major changes in research related to the Barents Region have shifted towards a broader understanding of both geopolitics and security. These changes have been driven by new approaches that focus on human-oriented matters. In addition, contemporary region-building with nation-states as major actors has promoted a new regional identity.

Analysis of new security dimensions and changes in geopolitics within the European North guide us to several conclusions about the status of geopolitics and security within the Barents Sea Region as an integral part of a globalised world. First, political tensions and military activities have reduced, stability has increased, and the exploitation and transportation of natural resources are increasing. Second, despite the fact that tension has reduced and there are fewer military bases and troops, the military continues to be present. The region remains strategically significant for the nuclear weapons systems of the Russian Federation and of the USA. Third, the region is of significant strategic importance on account of its abundant natural reserves of hydrocarbons and the new sea routes. Collectively, these factors illustrate why the Barents Region now has a crucial role within the international community and global economy. Fourth, new security challenges and approaches to their solutions have developed in the region. These security challenges include long-range air and water pollution, nuclear safety, various forms of environmental degradation, and the destructive effects of climate change. Therefore, interest in environmental and climate change issues has increased among northern populations and society organisations, alongside increasing apprehension about the upcoming security issues in the region.

The effort being made to build up the Barents Region is a good example of the significant ongoing geopolitical change from confrontation to co-operation. The foundation of the Barents Region can be thought of as the successful transformation of Northern Europe from the Cold War period to the 21st century. Nevertheless, the transformation has brought extensive climate change, intense use of natural resources, growing international interest in the Arctic's resources and new sea routes. These aspects make up the critical changes and challenges that the region faces in the new century (Heininen & Lomagin, 2016, pp. 273-274).

Ó Tuathail defined scalar classification – the activity of specifying location – as a crucial element of geopolitical thinking, as it relates the 'local' level to the 'regional' and/or 'global' level (Ó Tuathail, 2002, pp. 610-611). Due to misinterpretation of the sovereign rights of the A5[30] by the EU, Østhagen critically wondered "*are we talking about the same 'Arctic'?"* (Støre, 2012). "*We need a sober analysis of what is happening in the Arctic and not something like the 2008–2012 hype*." (Senior research fellow (iii) at FNI, 2018). Even just 10 years ago, the picture of energy was different. From 2007 to 2012, there was hype about the Arctic from both the EU and China. According to a Senior Researcher at FNI, there were many expectations and a superficial understanding about the situation and the future of the Region (Senior researcher at FNI, 2018),

"*The EU is changing all the time, it is very difficult to see what is behind* [the proceedings] *and they exaggerate very much, until they find what is going on in a region. There is a big gap between reality and thoughts and between statements and concrete measures*" (Senior researcher at FNI, 2018).

Another researcher at FNI argued that,

"*there is the EU effect versus the nation effect, both indirect effects. The EU were portraying the Arctic as unstable, but the last strategy paper was more conscious*" (Senior research fellow (iii) at FNI, 2018).

Public debate about the 'Arctic hype' influenced the geopolitical image of the Arctic, which affected European deliberations (Wegge, 2012, s. 26). In relation to the energy security of the EU, Buchan argued that geopolitical events, such as oil shocks in the 1970s and the collapse of the USSR, have generally driven European security concerns (Buchan, 2010, s. 371). In addition to that, Müller argued that regular summits, workshops and meetings or the issuing of supplementary documents and statements enable an organisation to achieve an extention of sovereignty over an issue and/or create legitimacy of analogous actions (Müller, 2012, s. 381). Similarly, Dodds and Sidaway argued that the circulation of geopolitical ideas depends on the "*production and dissemination of strategic text and maps*"

[30] A5: The five coastal Arctic states; Norway, Russia, USA, Canada and Denmark (through Greenland).

(Dodds & Sidaway, 1994, s. 518). Moreover, technology, apart from functioning "*as a passive conduit of human intentions*" also bears geopolitical realities into existence and therefore participates in the construction of geopolitical action (Müller, 2012, s. 386). Development of the new Galileo navigation satellite system could be considered to strengthen the position of the EU as an Arctic connector. The Galileo satellite provides increased positioning accuracy, which enhances navigation capabilities in the Arctic, reduces detection times and improves localisation. Eric Guyader, Galileo Programme Administrator at the European Commission, said that "*the EC's approach is to capture the strategic priorities of the Member States, including in the Arctic*…" (GSA, 2018). However, the most significant aspect in the development and establishment of the EU as an Arctic actor is the support of Arctic research from EU funds (Raspotnik A. , 2018, s. 163).

Alto explained the notion of critical geopolitics by arguing that "*Instead of only looking at the territorial effects of ordering – the classic geopolitics perspective – critical geopolitics rather focuses on the effects regarding the construction process of political spaces and the symbolic and material boundaries delimiting these spaces from others, the separation between 'us' and 'them'* (Aalto P., 2002, s. 150) Consequently, the geopolitical arena cannot be tightly adjusted within a set territory anymore. Structures, processes and flows must be taken into account in the geopolitical narrative of a region, and the EU draws on these factors for its power role and influence. The EU, as a 'space of meaning', is defining itself in two ways. Firstly, on the inside, as a political community built on a shared set of values and a sense of purpose, and secondly as a promising region-dominating and international power (Scott J. , 2011).

The concept of geopolitical subjectivity argues that the EU is better categorised as a geopolitical subject instead of an agent or actor. This reflects an understanding that a subject can obtain power to act but also to abstain from acting in given circumstances. Moreover, this approach allows for circumstances in which the EU is acknowledged as a legitimate subject by other subjects but declines "*to respond by means of any goal-oriented action, in that way reflecting a relatively weak 'internal' constitution of subjectivity*" (Aalto P., 2002, p. 148), (Raspotnik A. , 2018).

Geopolitical subjectivity allows for an understanding of how the EU could participate in modern geopolitics, as it establishes an approach for comparison with various geopolitical powers. The EU has been outlined as incomplete and in continuous development, without an established centre of power from which policies and robust outcomes would be obligatory to third parties (Aalto P., 2002, ss. 145-146). "*Instead, power and politics are imposed in a flexible framework in which the EU takes different forms*" (Boedeltje & van Houtum, 2011, s. 141). Therefore, the EU is consistently interpreted in terms of its member states, its neighbours and its complex bilateral and multilateral relations. Therefore, it can be argued that in fact the EU is incomplete project (Aalto P., 2002, s. 155), (Boedeltje & van Houtum, 2011, s. 141).

It is common for the EU to be the dominant policy actor in its neighbourhood, but the EU is disadvantaged to take this role in the unique 'regional system' of the Arctic, where strong actors have well-defined roles (Kobza, 2015, s. 5). For that reason, the Arctic challenges the extent of the EU's abilities in finding ways to obtain 'Arctic access', legitimise related action and, subsequently, to be involved in geopolitical discourse (Powell, 2011, s. 121), (Bailes & Heininen, 2012, s. 95).

Table 4: The EU's Geopolitical Ideas for the Arctic Region

- The EU as leader to tackle climate change
- The EU as a sustainability manager
- The EU as a governance stabiliser and enhancer
- The EU as promoter of the rights of indigenous peoples
- The EU as guardian of animal welfare

(Raspotnik A. , 2018, s. 134)

The uncertain rate of regional change and the consequences of this uncertainty beyond the region can be explained by the conflicting disadvantages and opportunities of exploiting the region, such as the Arctic's climate change and the hydrocarbon resources, which could have negative and positive effects for European citizens (Raspotnik A. , 2018, s. 153). For example, climate change could mean more unpredictable weather patterns, sea level rise and natural disasters but more accessible fossil fuels and shorter shipping routes.

Table 5: Emergent European Arctic Storylines

Storyline attribute	The 'facilitator' and 'manager'	The 'securitiser'
Where? Location specification	The Arctic as an international Region	The Regional aspect of a global Arctic
What? Situation description	Contemporary changes with future relevance; climate affects European security	Contemporary changes with future relevance
Who? Protagonist typification	A8 are all cooperation partners; EU responsibility for 3+2	The A5 potential for disputes
Why? Attributions of causality	Inside-outside nexus: the Arctic with repercussions for European citizens	Flag planting; maritime claims; high oil prices
So what? Interest calculation	The threat for Europe; EU's global leadership role; EU as a governance enhancer	(In)security of Arctic change; energy security

(Raspotnik A. , 2018, s. 152)

Recent concerns of the EU have largely focused on its southern borders, so the Arctic is of limited relevance to the EU in the foreseeable future. The region could be more relevant in the coming decades, but now – despite climate change and increasing global importance of the Arctic, it is not (Raspotnik A. , 2018, s. 175), (Stępień & Raspotnik, 2015, s. 434). In addition, although the Arctic and climate change are closely related, the origins of global climate change are outside the Arctic so need to be confronted there. Although the Arctic Region and the related ecosystems are severely affected by the global climate change, the sources of climate change are not among the Arctic landscape. So, in order to halt climate change, the EU has to focus its efforts outside the Arctic (Raspotnik A. , 2018, s. 176).

The ultimate values of the EU – co-operative and multilateral governance, democracy and peaceful co-existence – are already applied to the Barents Region, so it is not clear why the EU needs to be involved in Arctic matters. As Raspotnik argues, "*In contrast to the initial belief of the region being an unregulated space – a geopolitical 'hot' one – the circumpolar*

North has been an already well-configured space with territorial perceptions dominating over relational ones on how to effectively manage the Region and exercise related authority" (Raspotnik A. , 2018, s. 176). The geoeconomic possibilities – or even promises – of the Arctic have not been met, as the Arctic offers "*...no opportunities, necessities or real interests that would directly trigger enhanced European engagement*" (Raspotnik A. , 2018, s. 176). In addition, the Barents Region is not a priority area for the EU when it comes to engagement and intervention given that areas to the east and south are more violent and fluid (Stępień & Raspotnik, 2015, s. 434), (Stępień & Koivurova, 2017, s. 18).

In relation to the crises close to the EU in Libya, Syria and Ukraine, Bachmann argued that efforts of the EU to regulate the interaction of places could only be achieved "*as long as actors have an interest in being regulated … otherwise EU agency quickly reaches its limits*" (Bachmann, 2015, ss. 700-701). The Arctic is mentioned in the EU's 2016 Global Strategy report, but only as a negligible note in the broader foreign policy of the EU (European External Action Service, 2016). The peaceful Barents Region is treated as a positive story in the neighbourhood of the EU, and the EU is not "*in a revolutionary mode when it comes to the Arctic*". Given that the current situation in the Arctic is co-operative and beneficial to Europe, the EU would not attempt to "*upset the positive regional trends*" (Raspotnik A., 2016). Ultimately, the EU attempts to act as a unique geopolitical actor in the Arctic (Raspotnik A. , 2018, s. 177).

Critical geopolitics have conquered new frontiers during recent decades by re-evaluating the simple vision of classic geopolitics. It can be argued that geography and space affect political processes and must be treated as important elements of these developments. Nevertheless, from a critical geopolitical viewpoint, it is not enough to prove the existence or applicability of geography to politics, but it needs to be made clear that the defined meaning is created for an explicit reason. Consequently, discourse, not solely 'natural' facts, is recognised among the main influential component of geopolitics (Raspotnik A. , 2018, s. 24).
A British Professor stressed that the geopolitics of low-carbon energy systems have not developed yet as the energy system is undergoing a significant transformation. Consequently, if we continue to fixate on the problems of the fossil fuels sector, we will be missing a large part of what is going on,

"*The EU is in a difficult position, as its domestic production continues to decline. There is plenty of cheap oil; just not in the right places as far as Washington and Brussels are concerned. So yes, it is a fact of geography that creates the geopolitics*" (British Professor on global energy, 2017). What new geopolitical challenges does the development of new carbon alternatives create?

"*Russia supplies approximately 30% of the total gas demand of the EU, but this ranges from 100% for some member states to less than 10% for others, such as the UK. Consequently, the energy strategies of different member states can vary. In 2017, 75% of the UK's gas imports came via the pipelines to Norway*" (UK Department for Business Energy & Industrial Strategy, 2017). The Norwegian Ministry of Petroleum and Energy has highlighted a similar scenario for gas – gas security concerns in Europe are predominantly regional, and parts of Europe still depend on a single source of gas supplies. This is the core of the gas security problem (Norwegian Ministry of Petroleum and Energy, 2017). It has been argued that European countries have different strategies and that the EU is not interested in engaging in this problem. However, "*there are different political strategies and agencies within the EU, so we cannot generalise. We must instead consider that there are many actors, agencies, complexities and stakeholders within the EU*" (Russian academic expert, 2017).

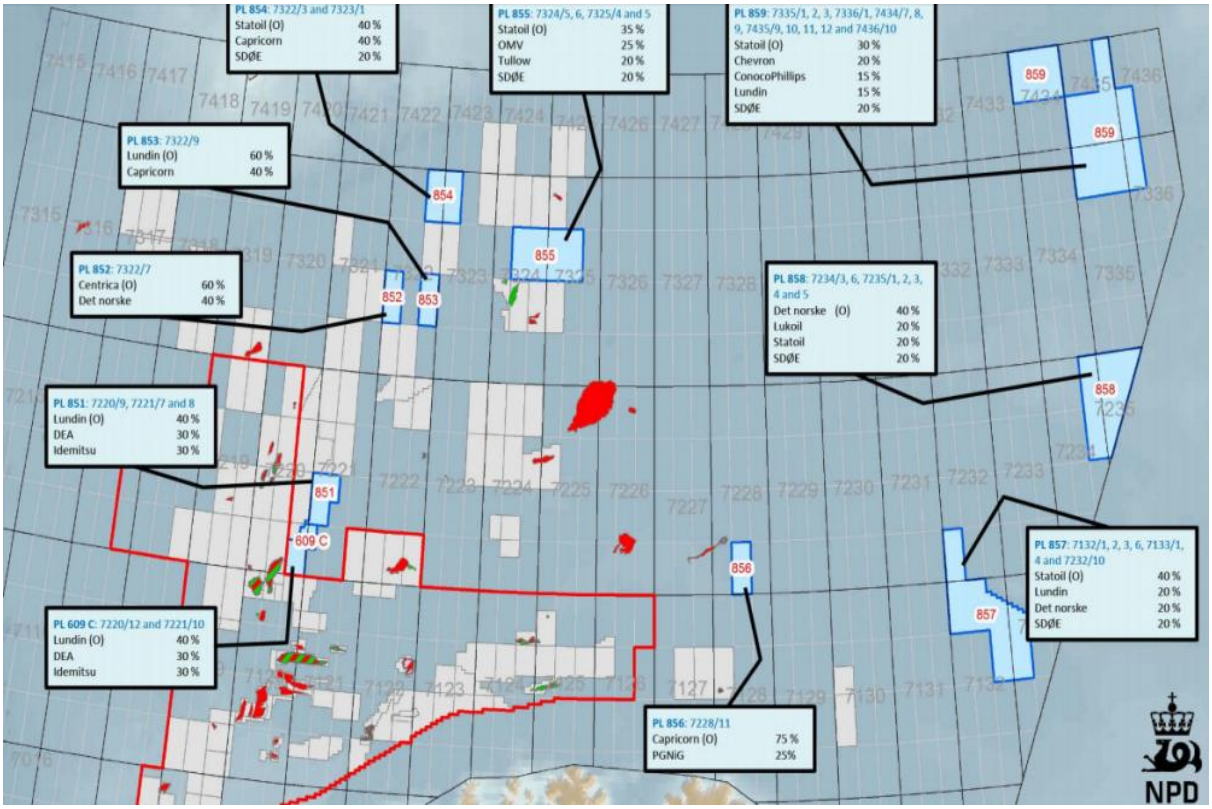
Norway tries to keep energy depoliticised and to depoliticise any elements that have been politicised. This approach creates policy issues; for example, Norway does not want to be left to deal with Russia alone in the Barents Sea,

"*Norwegians are very happy that Lukoil has 20% of the border exploration field 858, especially if there are recoverable reserves there, as Lukoil cannot get offshore licences in Russia because of the Rosneft monopoly. There are many companies in the Barents, but small ones. Big companies are not interested yet; they are reluctant. We have to remember as political scientists that these projects cannot start just from political will or interest. They have to have commercial values and they are very expensive. The EU can influence projects only very indirectly while it wants and needs Norway to be a supplier. The EU is importing energy, so it has to speak reasonably and divide energy from other relations as there are market principles and commercial interests. Russia needs the income from Shtokman and*

they are trying to find other investors, technology and markets. Russia also follows diversification through different logistics, but Arctic gas is not attractive anymore" (Senior researcher at FNI, 2018).

Exploration field PL858 is adjacent to the relatively new settled border between Russia and Norway. Lukoil is Russia's biggest privately-owned oil company and the first Russian oil company to be pre-qualified as an operator on the Norwegian continental shelf. This could be a sign of good neighbourliness from Norway to Russia, as co-operation in the Barents Sea has proven beneficial for both countries for centuries. As an expert put it, "…*Norway cannot co-operate with Russia for offshore exploration* [due to sanctions]*, but Norway and Russia have years of bilateral cooperation*" (Russian academic expert, 2017). So, Norway is co-operating with a Russian private company at its continental shelf, a move that could benefit many parties.

Map 12: The winners of the Barents Sea licenses in May 2016.



(Staalesen A., 2016)

After the annexation of Crimea from Russia in 2014, and the consequent sanctions from the EU and the USA, the geographical scope for Russia to exploit resources shrunk because western supplies of deep-water oil technology, equipment and expertise halted. Additionally, many Russian Arctic explorations and projects owned by Gazprom and Rosneft were halted, downsized or delayed owing to the suspension of finances from the EU and the USA (Aalto P., 2016, p. 58). So, while Norway tries to keep energy issues away from the political agenda and relies on the commerciality of fossil fuel reserves, Russia is suffering the consequences of using its energy exports to create political pressure.

"*The fundamental national interests of the Russian Federation in the Arctic are:*
a) Utilising the Arctic zone of the Russian Federation as the strategic resource base for the Russian Federation, ensuring… …the socio-economic development of the country.
b) Preserving the Arctic as a zone of peace and security.
c) Protecting the Arctic's unique ecological systems.
d) Utilising the Northern Sea Route as a seasonal, unified transport route" (Main, 2011, p. 11).

Melting of ice in the Arctic is a phenomenon with considerable geopolitical and geostrategic consequences, which undermines the validity of the axioms held by Mackinder and Spykman,

"*As a result of climate change and intensifying ice melting, the Arctic provides a new outlet for Russian goods that is shorter and faster. This liberates Russia from the so-called 'slavery to Rimland' – its dependence on the countries that form the ring of landmass that prevents Russia from entering the 'warm waters' of the Mediterranean Sea. Russia can now transport its goods using this new route*" (Professor of economic geography & geopolitics, 2017). But the NSR[31] has been also characterised as a new experiment between Russia and China (Associate fellow at FNI, 2018).

[31] Northern Sea Route

Table 6: Dependence of EU countries on Russian natural gas in 2011.

Countries	Imported natural gas (Gm^3)	Percentage of market controlled by Gazprom (Imports of natural gas, %)
Germany	31.4	36.7
Austria	5.4	51
Belgium	3.3	15.3
Bulgaria	2.5	100
Estonia	0.7	100
Finland	4.2	100
France	8.5	18.2
Greece	2.9	78.9
Hungary	6.3	85
Italy	17.1	24.6
Latvia	1.2	100
Lithuania	3.2	100
Poland	10.3	86.1
Romania	3.2	100
United Kingdom	12.9	26.6

(BP P.L.C, 2011), (Gazprom, 2011)

The figures in this table must be combined with the proportion of natural gas in the total energy mix of each country to enable robust conclusions to be drawn. For example, Finland and Estonia are 100% dependent on Russia for natural gas, but natural gas comprised only 7.5% and 6.6%, respectively, of their total energy mix of primary energy consumption in 2014. By contrast, gas imports to Hungary, Latvia and Lithuania are 85%, 100% and 100% controlled by Gazprom, respectively, and these countries have a high percentage of natural gas in their total energy mix – 31.4%, 24.8% and 20.1%, respectively. In 2014, the average proportion of natural gas in the primary energy consumption mix in the EU was a considerable 21.9% (EEA, 2016). The differences in dependence on Russia and the different proportions of natural gas in the total energy mix of each member state explains why there

are so many different voices and attitudes among the policy makers within the EU. Therefore, it is understandable that the road towards a common EU energy policy has been so slow and why a single EU energy policy might never materialise.

From a geostrategic point of view, reduction of EU dependence on Russia for natural gas is a major priority for the USA, defined by the model formed by N.J. Spykman[32]. Nevertheless, "*in the context of international geopolitical antagonism, as developed in Spykman's model, there are new patterns of power redistribution. The latter are connected to the Economic Pillar of power and especially to its energy geopolitical factors*" (Professor of economic geography & geopolitics, 2017).

The geopolitical framework of energy security based on the above-mentioned elements can be analysed through the 'Regions and Empire' scenario developed by Aad Correljé and Coby van der Linde. The scenario foresees the future of energy security issues through a "*division of the world into countries and regions, on the basis of ideology, religion and political arguments*" (Correljé & van der Linde, 2006, p. 536). "*The main underpinnings of this vision are the absence of effective international markets combined with highly integrated energy companies operating on a national basis. Foreign policy developments also tend to give credit to such a scenario. The division of the UN Security Council over the war in Iraq in 2003 is a telling example of different states or groups of states having diverging interests in a conflict in which energy considerations were never absent*" (Metais, 2013, p. 11). *Mutatis mutandis*, in the Barents Region, militarisation needs attention with respect to possible future accidents, but the strategic interests of multiple actors and deep co-operation act as strong stabilisers. "*For Norway, resource utilisation comes first but environmental concerns are high and increasing. There is a potential for even more co-operation between Norway and Russia – possibly a common oil and gas field on the new borders. The energy relations between Norway and Russia are deep, and the only problem is the Ukraine, which can be seen as a problem and as an ally. Why has the Arctic come high on the agenda when there are more difficult and problematic areas like the Mediterranean or Ukraine? The Arctic is a vulnerable area*" (Senior research fellow (ii) at FNI, 2018).

[32] "Who controls the Rimland rules Eurasia; Who rules Eurasia controls the destinies of the world."

8.5 Reflections

As the senior researcher from the Fridjiof Nansen Institute had argued above, the Arctic is a vulnerable area. The Barents Region is vulnerable at multiple levels, as there are contrasting economic interests between fisheries and fossil fuel extraction, environmental concerns, indigenous population issues, increased maritime shipping and military concerns. Having understood that co-operation and international relations in the region are settled, and the so called 'scramble for the Arctic' is not needed, the EU has pursued non-interfering policies, focusing more on sustainable development and scientific research.

Analysis of currently available data on the Barents Region suggests that the Arctic energy hype is almost over. Considerable reserves remain to be exploited, but it is very uncertain when they will be and even if they will be productive. Advancing climate change has persuaded most countries to reduce the use of fossil fuels, although climate changes has also provided new opportunities for shipping through the Northern Sea Route and extended the fishing boundaries. All economic activities, especially those in harsh environments, need a stable and safe framework to develop and thrive, so Norway and Russia are likely to keep the Arctic peaceful and co-operative in order to maximise their profits from the region.

The EU had an unclear picture at the beginning of the Arctic hype, from 2006 to 2012, and rushed to produce polices to enhance the stability in an already stable and co-operative region. Although not yet a full member of the Arctic Council, the EU has an undisputable role in the Barents Region not only through the production of policies, recommendations and communications, but also through financial contributions to environmental research and the promotion of sustainability. After 2012, with the Arctic hype having died down, and with the release of the 2016 communication on the Arctic, it became clear that the EU had understood that the Arctic is a peaceful and co-operative region, and instead tried to present itself as a unique geopolitical actor and as a 'global leader in science'.

The co-operation that has been built between Norway and Russia in this specific region can be traced back to the 16th century. In such a harsh environment that includes so many interests for both sides, a hard-military security would not benefit anyone. Despite many tensions in relations between the EU and Russia and between Norway and Russia (for

example, military exercises in the Barents Sea and the presence of NATO in Norway), the Barents Region seems to be almost unaffected. Nevertheless, future developments in military security, shipping and resource exploitation could harm this precious co-operation that has been built through centuries. For that reason, it is imperative to enhance the role of intergovernmental institutions that promote co-operation and constructive dialogue, like the EU and the Arctic Council do.

Chapter 9

Environmental and Societal Security at the Barents Region

9.1 Introduction

After presenting my results concerning critical energy security among the EU, Norway and Russia and the inter-relationships between those parties, I will now take a closer look at the most vital issues of insecurity in the Barents Region, its environment and its inhabitants. Extraction of energy sources from the Barents Region and politics have an immediate effect on these issues so they must not be overlooked if significant security issues of the region are not to be neglected. In this third and last results chapter, the environmental and human security at the Barents Region are scrutinised in order to answer the third research question of my thesis:

- In what ways can contemporary critical security studies be used to support the development of international policies that can support sustainable development in the Barents Region?

When examining a harsh and fragile environment like the Barents Sea, which is part of the Arctic Ocean, from a geographical perspective, it is important to consider the environmental issues in the area. In addition, the Barents Region is the home of indigenous populations and other people whose prosperity is inherently connected with the welfare of the land and sea in the region. Critical security studies provide a useful toolbox for analysis of those aspects, enabling state security to be put aside while focusing on different referent objects, such as the environment and people. Moreover, environmental concerns are relevant to geopolitical agendas because environmental disasters lead to societal turmoil and migration. Environmental security of the Arctic has comprised two elements. The first is protection of the region from endogenous sources of environmental harm, such as an oil spill from an extraction platform or ship, nuclear waste, plastic waste, biodiversity loss, overfishing and degradation of herding lands. The second is protection from exogenous

effects of global climate change on the Barents Region. For example, the rising temperatures that are reducing sea ice and thawing the permafrost must be tackled on global scale, not in the Barents Region itself. Similarly, burning of fossil fuels contributes negatively to climate security issues, but the effects are diverse and often geographically displaced from the cause.

From the interviews conducted, two broad themes emerged that were directly linked to environmental security and human security. The first theme, discussed in section 9.2, concerns the protection of the environment in the Barents Region and highlights the greatest contemporary hazards. The second theme, examined in section 9.3, explores the human security of the Barents Region, including the challenges and opportunities for the population of the region, focusing on the indigenous people.

9.2 Environmental Security at the Barents Region

In studying the environmental data on the Barents Region, I decided to first analyse global climate change, the exogenous threat to the Arctic. The fuels we use for primary energy consumption have a significant role in climate change, and I focus on these fuels in my analysis of data generated in interviews and in my analysis of official documents. I first focus on coal, the energy source that is most harmful for the environment, and the effort that the EU is making to limit its use. Then I depict the status of oil and natural gas on the energy mix of the EU. lastly, I analyse the upcoming role of the renewable energy sources within the EU's energy mix, and the challenges that they are creating for Norway and Russia.

At the beginning of the decade, the energy market transformed greatly, with the shale gas revolution taking place in the USA. This resulted in dramatic decreases in the price of coal, which became very cheap and popular among EU countries. On the other hand, the EU tries, through legislation, to discourage its member states from using coal in line with its environmental protection goals.

"*The end of the 2000s saw changes in the fuel market as the shale gas revolution reduced oil and gas prices*" (Senior researcher at FNI, 2018). "*The resulting abundance of gas also led to*

coal becoming very cheap and a very attractive fuel" (Senior policy analyst at FNI, 2018). A Research Professor at FNI argued that "*if the price of coal were to increase to 25–30 Euros– due to the European carbon market prices– coal factories might close. EU air pollution policies could also influence a transition away from coal. However, as coal is still very cheap, the only way to limit its use among EU member states is through European legislation and taxation*". "*Yet, the insistence on using coal is not just about its price but also incorporates elements of energy security*". It is mostly domestically produced, the market is broad and non-politicised, and its use creates many jobs (Research Professor at FNI, 2018).

In this context, Europe is being squeezed by cheap coal and the insistence of some EU states – for example, Germany – on building new coal-fired power stations. A British professor argued that "*the EU is not going to meet its commitments on the Paris agreement, neither their 2020 target because they are shutting down nuclear and they have a system of renewables, increasingly backed up by coal. They have gas and they have Nord Stream but this – coal – has to do with the regional structure of their energy system, even maybe with their economy. That is rather bizarre but obviously coal is still important to many European countries, like Poland*" (British Professor on global energy, 2017).

The same argument is made by Norwegian and Russian experts. "*Coal and renewables come first, and gas is only a 3rd or 4th choice. Both countries [Norway and Russia] face the same challenges when it comes to their gas exports – coal and renewables*" (Senior researcher at FNI, 2017). Germany is developing its own energy security by phasing out nuclear energy by 2022 and moving to renewables, but the country still relies mostly on coal. Gas is a very clean fuel compared to oil and coal and energy efficient. "*There will be constant demand of the Russian gas resources at least for two decades*" (Russian academic expert, 2017). In line with the arguments above, an independent Norwegian energy consultant argued that the German electricity market is dominated by coal. They use tremendous amounts of coal and lignite. "*But there is the dilemma of clean energy or jobs. Margaret Thatcher cut down coal, but she was lucky with the discoveries of oil and gas in the North Sea. But in Germany, [the situation] is different. Politics has as a target to secure jobs and, in Germany, coal plans equal jobs. Nuclear and coal are running on stable basis and gas is coming 4th as a more flexible fuel. Gas and renewables are more flexible, but they require the construction of*

plants. Coal power plants around the EU are all political" (Norwegian energy consultant, 2017). The diagrams below show the amount of coal and hard coal (lignite) that Germany uses in its energy mix for electricity production and clearly illustrate the dependence of Germany on coal.

Figure 10: Fuels used in Germany for electricity production January 2018 – January 2019 – solar, wind, biomass, hard coal (lignite), coal, and natural gas.

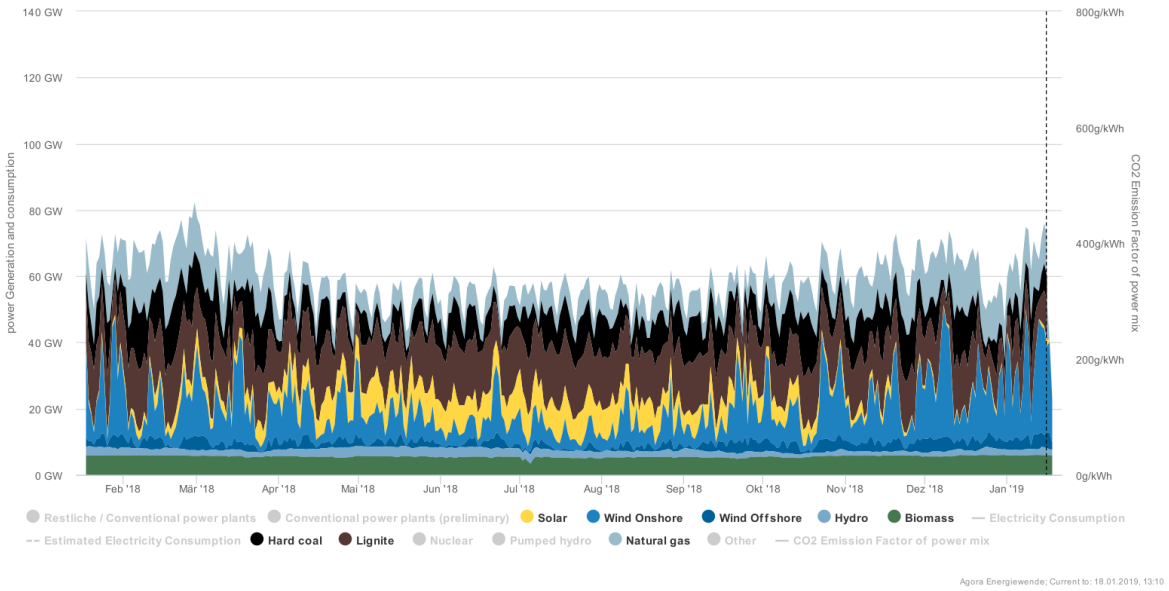
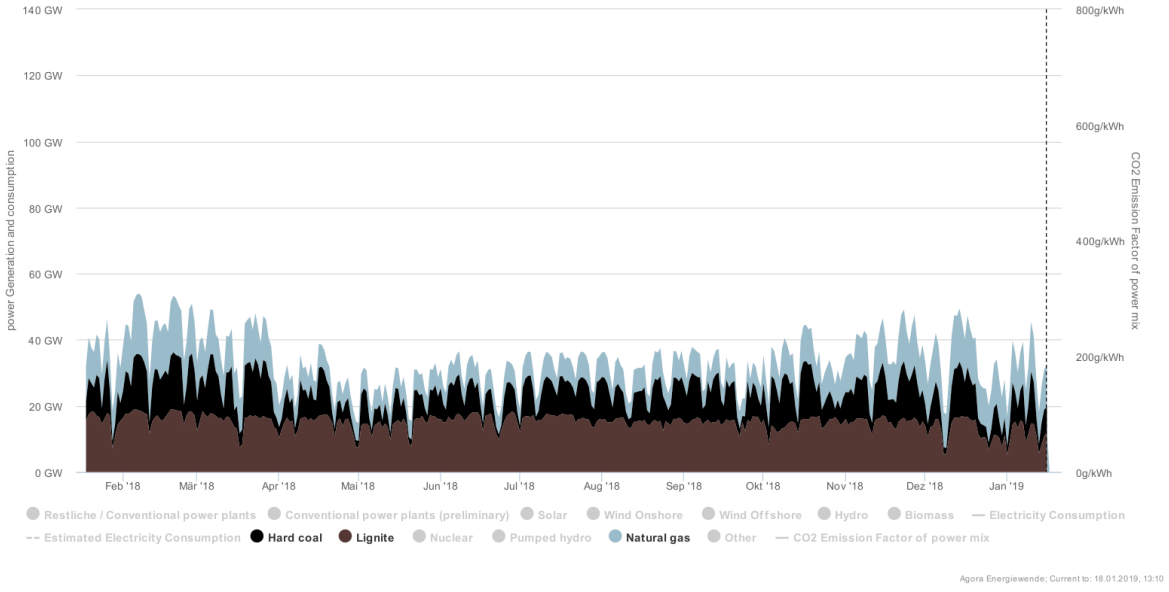


Figure 11: Fuels used in Germany for electricity production January 2018 – January 2019 – hard coal (lignite), coal, and natural gas.



(Agora Energiewende, 2019)

In Norway, expectations for greener energy were high but the gas market is not blooming, even though natural gas is a very clean fuel. "*The gas infrastructure is there but is still for backup. [Use of] LNG is increasing globally, the US and Qatar are delivering LNG, but Norway's short distances is an advantage*" (Senior researcher at FNI, 2017). From a Russian perspective, renewables are still very expensive, so "*Europe will be in need of Russian gas for a few more decades. That is why there is the Nord Stream II project. Gas is a very clean and energy efficient fuel. There will be demand of the Russian resources*" (Russian academic expert, 2017).

This situation could be changing, as Norway – Germany's third biggest gas supplier after Russia and the Netherlands – could make further inroads into the German market as the country phases out coal. In 2018, coal accounted for 38% of power generation in Germany versus just 7.4% for natural gas. A commission that includes politicians, researchers and lobbyists is likely to propose the closure of half of the nation's 43 gigawatt (GW) hard coal and lignite fleet by 2030. The faster the phase-out of coal, the stronger the demand for gas, because there is no other viable alternative (Eckert, Steitz, & Käckenhoff, 2019).

The use of coal and lignite in EU countries, such as Germany, Poland and Greece, is criticised for the negative contribution to climate change, but discussions about oil and gas have a different emphasis. Norway and Russia generate huge revenues from these fuels via global exports. As a consequence of these global exports, these fuels also contribute – albeit to a lesser extent than coal – to global climate change, but their extraction also poses a considerable risk to the Barents' environment. In that context, I analyse the contemporary energy dynamics in the Barents Region and their environmental implications.

9.2.1 The Potential of Fossil Fuels at the Barents Region

To date, there are only four extraction projects in the entire Barents Region: Snövit and Goliat in Norway, and Priraslomnaya and Yamal LNG in Russia. The Goliat oil field, which produces 100,000 barrels per day, has had several safety incidents since production started in 2016. After a two-month shutdown in 2017 for improvements, additional problems were found in 2018, placing the Italian oil company Eni under pressure to improve safety

(Reuters, 2018). The Petroleum Safety Authority of Norway (PSA) stated that "*Faults and deficiencies are still being uncovered, which, combined with the quantity of outstanding maintenance, present challenges related to handling individual and overall risks on the facility*" (PSA, 2018). Shtokman, the biggest natural gas field in the world, in Russia "*has failed and production has been postponed indefinitely*" (Senior policy analyst at FNI, 2018). Nevertheless, it has been argued that the Barents could be a key factor in EU strategic relations with Norway as "…t*he EU needs resources and they could also learn something from Norway considering resource management*" (Senior research fellow (ii) at FNI, 2018). For example, Norway uses electricity produced domestically from hydro-dams but exports its fossil fuels.

Moreover, "*Johan Castberg oil field* [(formerly Skrugard)] *northwest of Hammerfest, with a breaking point of $25–$30, is becoming a feasible development. The fall in the oil prices in 2014–2015 inhibited development of the field, but new technology has made its exploitation cheaper and feasible and the production is planned to start in 2019-2022*" (Staalesen A., 2017) creating "*substantial value and spinoffs for Norway for 30 years*", (Equinor, 2019) & (Knight, 2018).

Some Norwegian experts have argued in favour of further fossil fuel exploitation. "*More oil means more employment and higher salaries within the Barents Region. However, there is a lot of natural gas and LNG available from various countries and the competition over prices and contracts is high*" (Associate fellow at FNI, 2018). "*In Hammerfest, the population is very keen on fossil fuel extraction and there is an increasing development in the Region*" (Russian academic expert, 2017).

Other experts have argued that European gas demand could fall because of renewables. The current situation in Europe is that domestic energy production is falling, dependence on imports is increasing, and there is uncertainty about future demand for gas. It is very likely that in the 2040s–2050s, there will be an excess of oil and gas, meaning that prices will be low, and it will not be possible to make money from exploitation of the Arctic. Indeed, arguments against Arctic oil and gas development include not only the environmental impacts but also the fact that it is bad business because it is too expensive shareholders will

never regain their investments. In addition, Arctic drilling poses a big risk to the reputation of parties involved. The crucial argument made by a British expert on global energy is that,

"*Arctic oil and gas are needed only by the holders of the reserves*" (British Professor on global energy, 2017). These holders are Russia and Norway, through the state-owned companies Gazprom and Equinor (Former Statoil), respectively. Multinational companies are not involved in the Arctic oil and gas industry because Arctic drilling might damage the reputation of a company and Arctic exploitation does not generate huge revenues for these companies.

A European official argued that Russia could explore the whole of Siberia and the Barents Sea for energy resources in future, but the timescale is unclear. "*The EU is unlikely to benefit from these resources if, by the time exploration begins, the mix of energy consumed in the EU has changed dramatically*" (European Official on Russian affairs, 2017), towards renewable energy sources. Accordingly, a researcher at FNI argued that there are resources but the need for them is not apparent, even though energy and oil demand is increasing and "…n*ow there is a lack of investments in oil, as the price is very low but maybe this is a peak demand. Probably in 5–6 years, oil prices will increase because of the lack in infrastructure. OPEC*[33] *and IEA*[34] *argue that we will need more oil in the future*" (Associate fellow at FNI, 2018). The EU argues that Norway is one of the best exporters of fossil fuels, as they are very environmentally aware and are helping the EU to reach its climate protection goals. Unfortunately, on the other hand the EU does not commit on Norwegian energy exports. An expert at FNI argued that, "*The debate in Brussels about Arctic oil and gas exploitation was and probably still is, that i) Norwegian gas is the cleanest compared with all other gas around the world and ii) as Norway has the cleanest oil and gas (including the strict regulations), it has to remain an intermediate as a very stable and reliable supplier. On the other hand, EU states seem reluctant to emphasise on gas from Norway. There is an agreement between the UK and Norway, but other countries are quite reluctant to commit to Norwegian gas (e.g.Germany) with long-term gas agreements. So, how far has Norway to*

[33] OPEC: Organization of the Petroleum Exporting Countries
[34] IEA: International Energy Agency

expand its pipelines to the North, as the EU is an unstable and reluctant buyer of gas?" (Senior researcher at the Arctic Institute, 2017).

The reluctance of other European countries to commit to long-term contracts with Norway is peculiar, even after the natural gas crisis between Russia and Ukraine. In addition, one more expert discussed the expansion of the existing pipeline network, this time in relation to the potential amount of energy at the Barents Sea. "*We* [the Norwegians] *must consider that extension of pipelines to the Barents Sea would create a long stretch of pipeline with no connected fields until mid-Norway. Therefore, there must be test drilling to the East Norwegian Barents to see what is there*" (Senior researcher at FNI, 2018). Given that the pipelines are not viable if they are not connected with extraction fields, an extension to the Barents Sea might not be worthwhile. Moreover, if the pipelines extend further North to reach the Barents Sea, they would probably have to cross through the Lofoten–Vesterålen area, a controversial issue for Norway.

The final and most crucial thoughts about the energy future of the Barents Region come from a senior policy analyst at FNI. Oil prices and production are being decreased, while environmental resistance is being increased. There are no major discoveries in the Barents Sea yet, and the transportation of energy is a big issue. He argued that "*…in summer 2017, the realities have changed. It is now very unlikely that the Barents Region will be a centre region concerning oil and gas exploitation. There is not much energy in the Barents. Bad news for the petroleum industry but good news for the environment*" (Senior policy analyst at FNI, 2018). After the Arctic hype of 2007–2012, we now know that the Barents Region will not be a global energy hub like the Middle East, but it will continue to contribute to the energy security of the EU. Moreover, the Barents Region could be the first hub for export of renewable energy in the world if the appropriate investments materialise.

9.2.2 The Potential of Renewable Energy at the Barents Region

Developments in renewable technologies play a crucial role not only in the environmental security of the Barents Region but also in the energy security of the EU. The aim of renewables policies of the EU is to increase the share of renewables and increase carbon

market prices. The carbon market is politically created (the CAP[35] and Trade[36]); "*Energy is political and energy markets are. Member states want to preserve their interest and not leave it to pure liberalisation*" (Research Professor at FNI, 2018).

Most of Norway's energy comes from renewable sources but Norway has also invested in the UK's renewable sector (UK Department for Business Energy & Industrial Strategy, 2017). The promotion of renewables within the EU is beneficial because it creates jobs and because the energy production is domestic. Nevertheless, as one energy expert reflected, "… *renewables introduce other sources of insecurity, as they are intermittent. That intermittency creates a challenge for the electricity system of balance. The issue of interconnection as a solution to energy insecurity (the intermittency, especially of renewables) assumes that when you need that energy, there is a surplus to your interconnected country*". (British Professor on global energy, 2017). Therefore, "*the priority of EU countries is the overcapacity of renewables*". (Norwegian energy consultant, 2017). "*Whilst Germany is moving to renewables, it still relies on coal for energy production. It needs to dramatically reduce coal, but it is not easy. Renewables are still quite expensive, so they need Russian gas*" (Russian academic expert, 2017). "*On the other hand, renewables are a challenge for both Norway and Russia against their oil and gas exports*" (Senior researcher at FNI, 2017). So, the importers of energy (the EU countries) and the exporters (Norway and Russia) are trying to adapt to the new environment of energy production and trade that the renewable sources are creating.

In Norway, decisions about energy and renewables are made at a national level, but if a Norwegian region says no to a development, the plan is revised. In this context, one researcher at the FNI reflected, "*There is a major distinction between environmental protection (use of renewable energy) and protection of natural ecosystems; for example, installation of wind turbines is a controversial development for the Sámi herders. In addition, people do not want to see wind turbines, so they are being installed in places where the*

[35] The cap on greenhouse gas emissions that drive global warming is a firm limit on pollution. The cap gets stricter over time.

[36] The trade part is a market for companies to buy and sell allowances that let them emit only a certain amount, as supply and demand set the price. Trading gives companies a strong incentive to save money by cutting emissions in the most cost-effective ways (EDF, 2019).

environment is most vulnerable, mostly in untouched nature, so roads and infrastructure need to also be built in these environments. *Most small municipalities and rural areas are in favour of these developments because they create income for the community. However, once installation is complete, income is minimal, so some communities do not want them installed*" (Researcher at FNI, 2018). It becomes clear then that renewable energy does not come without dilemmas and discord among societies that have their own distinct interests.

In Norway, almost 98% of domestic consumed energy comes from hydropower, installed in rivers. More renewable energy could be produced by windfarms, but the projects are still dependent on battery technologies and prices of the energy market. Many researchers from the FNI commented on that. "*Hydropower is state and region owned, as international companies cannot own big shares. Wind power is mainly for exports, which would help the EU's emission system to comply with the CO_2 quotas. Will renewables actually replace fossil fuels at some point? But also, what are the impacts of windmills and other renewables on nature? In Trondheim, there is a plan for a huge wind power installation, and Europe's largest onshore wind power farm will be built in Central Norway*" (Researcher at FNI, 2018). There are also plans for offshore wind farms, and Equinor has wind projects in Scotland and England. "*Wind turbines are international companies' investments. The prices of infrastructure will probably reduce in future. So, if Norway exports electricity to the EU, will the value of electricity increase too much, even for the domestic market in Norway?*" (Researcher at FNI, 2018). This point was also made by another researcher who argued that "*there are huge amounts of hydropower energy in Norway, but domestic prices would increase if Norway exports more electricity*" (Senior researcher at FNI, 2018)."*Also, there are political issues for fossil fuels, as they provide energy and money to the economy. There are negative prices* [of electricity] *sometimes in Germany because renewables are very cheap. You can't control the renewables due to a bad grid. There are system issues*" (Researcher at FNI, 2018). With cheaper technology and better storage, renewables could grow faster.

These references to renewables demonstrate that the energy issues between Norway and the EU do not solely concern fossil fuel exploitation but also the recent developments in the renewable energy sector. Traditional power grids, which rely on fossil fuels to generate electricity, are designed so that output matches demand. But renewable energy technology has not yet been developed to produce energy according to demand, as generation relates

to the weather, which is generally unpredictable. A lot of electricity is produced in the right weather conditions, but the excess power is difficult to store – battery technology is not advanced enough to moderate the supply to the grid (Berke, 2017).

9.2.3 Contemporary Environmental Concerns at the Barents Region

Environment became part of the security concerns of Norway in the early 2000s. As Hosain points out, "*While traditional security issues, like war and conflict, may not be a source of tension in the region, non-traditional security issues – transcending national jurisdictions – often pose significant challenges for northern communities*" (Hosain, Zojer, Greaves, & Roncero, 2017, p. 3). Even during the first decade of the new millennium, a prevailing concern for the Norwegian Ministry of Foreign Affairs was nuclear waste in northwest Russia. As the Ministry argued, "*There exists in our immediate vicinity nuclear energy along with a great number of demobilised nuclear submarines, large stocks of spent reactor fuel and radioactive waste in solid and liquid form. There are hundreds of lighthouses along the coast of the Kola Peninsula run by inadequately secured and highly radioactive sources. We are confronted by a threat to the environment and security; it is obviously in our interests therefore to help solve the problems*" (Norwegian Ministry of Foreign Affairs, 2004). Nuclear contamination or an oil spill in the Barents Sea could ruin its rich fishing waters and severely harm the economies of both Norway and Russia.

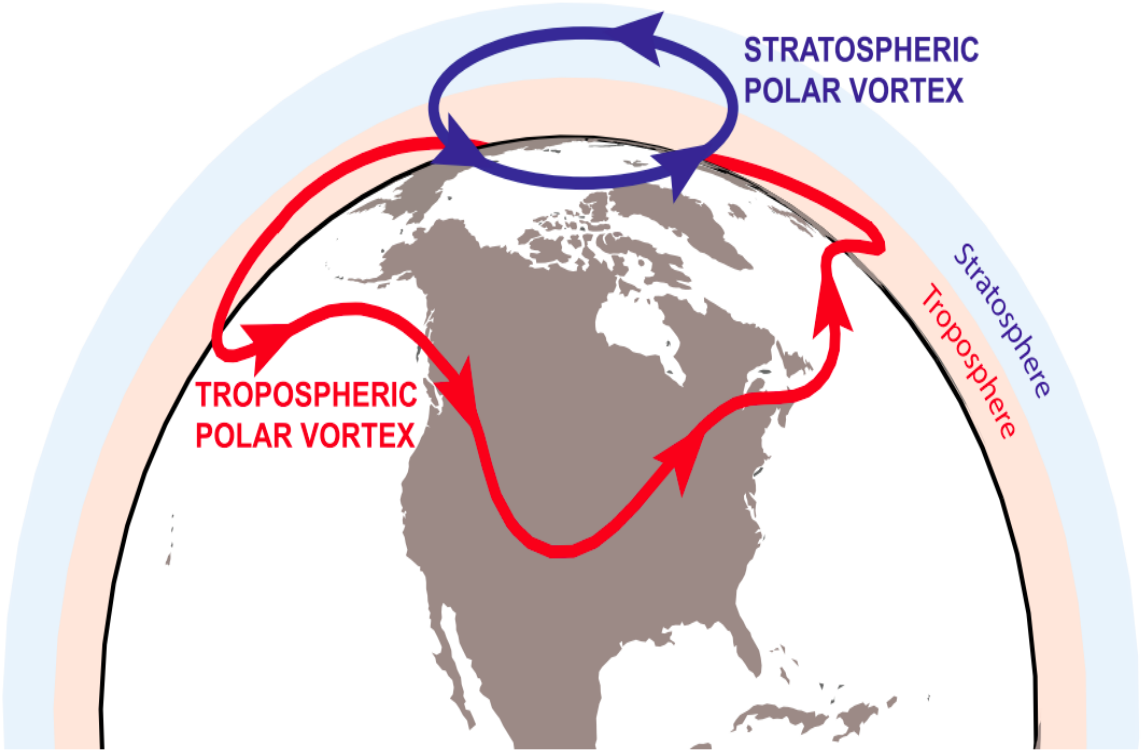
It is not just the physical environment that is changing but also the ecosystem. Global warming has caused several fish species in the Barents Sea to move further northeast at a considerable pace. It is imperative to monitor what is happening north of Svalbard. 2018 was the second-warmest year, after 2017, in the Arctic since 1900. A continuous, rapid increase in temperature has been seen in the region, greater than increases in the rest of the world (Markusson, 2018) & (Renner, et al., 2018). There are concerns about pollution in the fragile environment of the Svalbard archipelago, as even the smallest leak of diesel is enough to kill sea birds. Furthermore, it is very difficult to take action in the event of an oil spill in the area because of the harsh environmental conditions. If the oil reaches the sea, the damage is done (Berglund, 2019).

The Arctic will continue to change until 2050, even if we manage to stabilise the increasing temperature below the 2˚C threshold agreed in the Paris Agreement. Melting sea ice, plastic waste and loss of biodiversity are the major environmental issues in the Arctic and are a significant burden for marine, terrestrial and freshwater ecosystems. The summer sea ice volume has already been reduced by 75% from 1970s, and by 2040 it is very likely that the Arctic ocean will be ice-free during summer (Kroglund, 2018). Along with the shrinking of sea ice, the habitats of sea-ice-dependent species are shrinking as well, with crucial effects on walruses, seals and polar bears. Recent changes in rain and snow patterns are also allowing ice to cover the vegetation (moss and lichens) and, as a result, reindeers and caribous cannot reach their food (Kroglund, 2018). For people who make a living from harvesting, fishing, herding and agriculture, these changes will have devastating effects. Sadly, significant quantities of marine litter have been found in the Arctic, including microplastics. Some of them come from the Arctic, but the majority reaches the Arctic through sea currents from all around the world. More research is needed to understand the true hazards of microplastics, as they are being absorbed by filter feeding microorganisms that form the very base of the food chain (Gillman, 2018). As the Arctic sea ice retreats, more human activity, such as shipping, fishing and exploration for fossil fuels, is taking place within pristine habitats, increasing the possibility of a disastrous accident that pushes the Arctic region to the brink of a natural catastrophe. So, the EU needs to pursue the use of greener energy (natural gas over coal and ultimately renewables), reduce its plastic waste and establish strict maritime criteria for the use of the Northern Sea Route.

The rate of warming in the Arctic is much faster than that for the rest of the planet, and unusual weather patterns are already developing, such as the “Beast from the East” in the UK in late February 2018 (Gabbatiss, 2018a). Recent research has confirmed that temperatures in the Arctic are increasing approximately three times faster than the global average. One of the main reasons is the loss of sea ice in the Region. As Arctic sea ice melts, energy from the sun that would have been reflected is instead absorbed by the ocean. In combination with weather systems, this warming has global effects on climate. A polar vortex – allow-pressure weather system – in the stratosphere over the Arctic creates strong west-to-east winds that encircle the North Pole. Boundary winds between this polar vortex and another in the troposphere create the jet stream winds, and the position and strength

of the jet stream have a big impact on mid-latitude weather. When the jet stream is strong, its fast-flowing winds provide a barrier between the cold air over the Arctic and the milder air further south. When it weakens, the jet stream slows and can develop kinks. This allows the cold Arctic air to spill out into the mid-latitudes and for warmer air to spill in the Arctic Region (McSweeney R. , 2018).

Figure 12: Schematic of stratospheric (blue) and tropospheric (red) polar vortices.



(Waugh, Sobel, & Polvani, 2017, p. 38)

If the updated Paris agreement target of limiting the global rise in temperature to 1.5°C is not achieved, important fish species, such as the Atlantic cod and its Arctic relative the Polar cod, would have less chance of survival. Moreover, their habitats could move further north, as many of these species can spawn only in very cold waters. For example, Atlantic cod currently spawn near the Lofoten archipelago, northwest of Norway. The currents take the floating eggs, and later the larvae, northwards to their ideal living conditions in the Barents Sea (Ryan, 2019). Rising temperatures are not the only problem for the fish. Increased acidification of the oceans and seas has also been observed because as more CO_2 builds up in the atmosphere, more dissolves in the ocean. Carbon dioxide reacts with water to form

carbonic acid, which acidifies the ocean. As a result, the traditional habitats of Atlantic and Polar cod around the coasts of Norway and Iceland are becoming warmer and more acidic. Consequent losses for the fishing industry could be severe, as £2 billion-worth of cod (800,000 tonnes) are caught in this area every year.

Norway has complained about Russian fishing trawlers catching undersized fish, and Russia has complained about Norwegian fishing in spawn areas, especially at Lofoten and Vesterålen (Senior research fellow (i) at FNI, 2018). As on senior Arctic researcher observed, "*The Lofoten case about oil and gas exploration is very old and may hold over 10 years from now, depending on the oil prices and actors' interests. The main rivals are the economic opportunities from fossil fuel exploitation versus the ecologists and fisheries*". Lofoten is a spawn area for cod but it is also a cultural area, as it has been a major and important fishery for Norway for centuries; its exports date back to the Hanseatic League of the 12th century. What is more, "*the cod that spawn in the Lofoten area travel to the east Barents Sea* [Russia]*, but they reach their commercial size in the western Barents Sea* [Norway]*. So, the Lofoten case is more complicated than it seems. Everything relates to fisheries in Lofoten, even tourism*" (Senior research fellow (i) at FNI, 2018).

Recent estimates by the Norwegian Ministry of Oil and Energy suggest that Lofoten could hold 1.3 bboe. However, a controversial plan to open the Lofoten–Vesterålen area for fossil fuel exploration and exploitation was put on hold in 2018. According to the WWF[37], the waters around Lofoten Islands are the breeding area for 70% of all fish caught in Norwegian waters in the north. The oil industry says that the value of the oil in the region could represent as much as $65 billion, yet it may never be exploited (Nilsen T. , 2018). "*Lofoten may become a UNESCO site with no development, but only preservation*" (Researcher at FNI, 2018).

March 2018 saw the second lowest maximum extent of winter sea ice in the Arctic, beaten only by 2017. In 1985, 16% of the Arctic's sea ice was older than 1 year, meaning that it had survived thawing during summer. Now, this percentage is barely above 1%; 99% of ice is exposed to melting and flowing as it becomes thinner over the years. The extent of coastal

[37] Worldwide Fund for Nature. A Non-governmental organization.

sea ice has also been halved since the 1970s. The increasing temperatures in the Arctic affect not only marine species but also land animals, such as reindeer and caribous, whose populations have been reduced by more than half (from 4.7 million to 2.1 million) since the 1990s, and the herds are still declining. Summers have become longer and warmer, favouring parasites and causing heat stress to these winter-adapted grazing animals, and droughts prevent grass from growing. "*New and rapidly emerging threats are taking form and highlighting the level of uncertainty in the breadth of environmental change that is to come*" (Osborne, Richter-Menge, & Jeffries, 2018).

In 2017, CO_2 pollution increased by 1.6% after a continuous decline for three years. In 2018, CO_2 emissions reached an all-time high, increasing by approximately 2.7% (Harvey C. , 2018). Even if the most optimistic climate predictions are believed, submerging of islands, widespread species extinctions and extreme weather are unavoidable. Despite substantial efforts to limit the use of fossil fuels in many countries, reduction of emissions is still insufficient to keep warming levels below $2^{o}C$ from pre-industrial levels, let alone the more ambitious target of $1.5\ ^{o}C$. Scientists predict fast-melting Arctic sea ice, climate refugees and dying coral reefs if the temperature increase exceeds $1.5^{o}C$. "*The science is clear: for all the ambitious climate action we've seen, governments need to move faster and with greater urgency. We're feeding this fire while the means to extinguish it are within reach*" (Gabbatiss, 2018b).

Warming oceans are having severe global effects, such as increased rainfall intensity, rising sea levels, destruction of coral reefs, declining ocean oxygen levels and declines in ice sheets, glaciers and ice caps in the Polar regions. Declining Arctic ice is contributing to sea level rises, which have severe effects on economies by, for example, lowering coastal real estate values and increasing costs of food production and distribution because different weather patterns and extreme weather are transforming once fertile lands into barren landscapes (Shoot, 2019).

Often, economic and environmental security of Arctic states relates more to national priorities than to societal or human security (Martín, 2018, p. 26). The crucial element of environmental security is to ensure the wellbeing of the environment and, consequently,

the wellbeing of communities that depend on it. Protection of the environment from heavy industry could positively affect the local communities who depend economically on fishing, gathering or reindeer husbandry. What is more, heavy industry in the Arctic, and consequently in the Barents Region, would benefit our generation, but the non-renewable nature of the resources means the benefits for future generations is an uncertain. Therefore, environmental security must protect the ecosystems of the Barents Region for future generations by limiting the effects of climate change, cleaning up contaminated sites in the Arctic and ensuring preservation of the environment (Martín, 2018, pp. 34-35)

Within the Barents Region, environmental, economic and health security are strongly linked because the region depends economically on natural resources, and pollution poses many threats to health because game and other traditional foods are still a major source of nutrients. There is a clear contradiction between environmental security and economic or societal security. Various economic activities create a "*growing pressure* [in the natural and cultural environment] *as a result of a more intensive use of areas on land and the sea and of living resources, the development of infrastructure, growing industrial activity and rising transport volumes associated for example with the petroleum industry*" (Norwegian Ministry of Foreign Affairs, 2006, p. 45). The balance between these securities is very sensitive, as all must be addressed to attain human security.

Environmental security in the Barents Region can refer to the global struggle to cope with climate change and reduce CO_2 levels, but also to endogenous, regional, environmental protection from potential domestic sources of pollution, such as like extraction activities, shipping, overfishing, plastic waste and nuclear contamination. The paradox is that while the extraction of fossil fuels in the Barents Region has not yet caused yet a direct environmental disaster in the region, such as an oil spill, exporting these fuels around the world indirectly contributes to climate change. As the energy potential of the Barents Region is falling, it is important to concentrate on maintaining the high standards of existing oil and gas fields while trying to preserve untouched environments, such as the Lofoten–Vesterålen region. Overall, environmental security remains satisfactory in the Barents Region, despite rapid environmental changes and increasing economic activities (resource exploitation, shipping and hazardous substances). The main reason is that there is a legally binding, globally

legitimate legal framework that governs the economic uses of the region that are likely to expand in the years ahead. This framework can respond flexibly to the new challenges created by greater economic activity. The actors involved in the region articulate their Arctic aspirations in policy documents that emphasise the rule of law and the need for international co-operation (Stokke O. S., 2017, pp. 83-84). Those responses must involve more institutions in addition to regional ones because many of the regional environmental problems originate outside of the Arctic or involve actors beyond the jurisdictional reach of the states of the region. "*Already, assessment reports in areas such as shipping, toxics and climate change have raised the saliency of the Arctic dimension of broader problems and helped mobilize political energy among states outside the region. This regulatory dynamism* [of the Arctic Council] *in broader regimes is necessary for the effectiveness of overall governance system and for maintaining environmental security in the Arctic*" (Stokke O. S., 2017, p. 84).

Despite Stokke's arguments, the environmental changes remain a source of insecurity in the region. Climate change is accelerating, temperatures are rising, and pollution is ongoing; these are key issues in the region. Environmental insecurity must be confronted by global and regional actors through actions and not only words. The focus must change from fossil fuels to investment in renewable energy sources, as fossil fuels could irreversibly damage the environment on which so many other economic activities depend. This would have a devastating impact on the environment and, consequently, on the human security of the Barents Region. The EU could indirectly help to protect the Barents Sea through energy diplomacy, by stopping use of coal and lignite, by reducing oil and gas usage and production of plastic waste, and by increasing the share of renewable energy in its energy mix.

9.3 Societal Security in the Barents Region

According to the Copenhagen School of thought, societal security is "*the ability of a society to persist in its essential character under changing conditions and possible or actual threats*" (Wæver, Buzan, Kelstrup, & Lemaitre, 1993, p. 23). Societal security considers the issues that affect the identity of a society, because if a society loses its identity, it could cease to exist. Buzan et al. argue that when the existence of a society or a societal identity is

threatened, resulting in the possible loss of a communal feeling, protection of the society's survival and sustainability call for extraordinary measures. (Buzan, Wæver, & de Wilde, 1998). Giddens has argued that societal security is rooted in political sociology – it is about a relationship between community and security (Giddens, 1991). The Aberystwyth School of thought has contributed to the deepening of the security agenda from the state towards community and individuals. In the Barents Region, the indigenous communities could be the most valuable actors and contribute the most to the welfare of the indigenous population. As has been argued by Booth, Security of the state does not always mean the security of the individual. Security is a normative concept and only when security is being reconceptualised as emancipation are people free from "*physical and human constrains*" (Booth K., 1991, p. 319).

Human security can adequately promote societal security for the indigenous populations of the Barents Region by protecting their identities and the existence of their distinct communities. "*Human security, as a concept and theoretical platform, can support different voices and perspectives*" (Hoogensen G. G., 2014, p. 70). The understanding of human security overlaps with the concept of societal security, as "*the ability of a society to persist under changing conditions and possible and actual threats. More specifically … the sustainability, within acceptable conditions for evolution, of traditional patterns of language, culture, association, and religious and national identity and custom*" (Hosain, Zojer, Greaves, & Roncero, 2017, p. 61). Placing the individual and the societies where they belong as referent objects, the key aspect of societal security becomes the security of every individual.

According to the regional security complex theory of Barry Buzan and Ole Wæver, "*since most threats travel more easily over short distances than over long ones, security interdependence is normally patterned into regionally based clusters – security complexes*" (Buzan & Wæver, 2003, p. 4). Within a security complex, states and other actors are strongly related such that their securities are entangled and inseparable. In the Arctic region, this idea applies to the environment and the indigenous populations, who are spread across national borders. The work of the Arctic Council – from the Arctic Monitoring and Assessment Programme (ACIA) and Arctic Human Development Report (AHDR), to the Arctic Marine Shipping Assessment (AMSA) (2009) and Search and Rescue agreement (2011) –

follows the principles of a regional security complex. Security complexes are particularly remarkable in the Arctic, as they address traditional security issues even though the primary basis for the interdependence of security issues is human security (Exner-Pirot H. , 2012). Sven-Roald Nystø, former president of the Norwegian Sámi Parliament, argued that the renewed securitisation of the Norwegian Arctic through the government's High North Initiative (Jensen & Skedsmo, 2010), (Jensen L., 2012) has produced a dynamic, with negative implications for Sámi: "*We are taking on environmental security, society security, energy security, and so on and so on. And that in itself puts much more light on the high political issues in the Arctic and excludes a lot of stakeholders in the discussion on how to put forward civility in the Arctic debate. I think we have taken a couple of steps back in the desecuritization on the Arctic, and where it ends I'm not quite sure, but one of the losers in that process are, of course, indigenous peoples*" (Greaves, 2016c, p. 473). When an issue or a complex of issues is moved into high-level politics or onto the security agenda, the voices of the weaker stakeholders, who are still concerned about these issues, are usually excluded from the new policies or strategies. In the Barents Region, where human, environmental, energy and economic security are interconnected, the voices of the indigenous population must be seriously considered. Climate change is integrated with environmental security and has many different implications. Climate change and its effects have to be controlled, while at the same time populations have to adapt, to the already observed impacts at societal level, as it pressures indigenous communities into certain ways of living. Consequently, climate change is a major threat to the "*wellbeing of Arctic residents and their communities*" (Althingi, 2011).

Life-changing threats of societal and human security in the Barents Region are related with widespread economic development, environmental protection, culture and identity. By "*Using human security as an analytical tool, factors that threaten the societal security of Arctic populations can be identified. In this way, human security can be used as a tool to voice the concerns, perceptions, and desires of Arctic populations. It can also be used by policy-makers and local stakeholders to decide on matters that will benefit both local Arctic populations and the region at large*" (Hossain, Martín, & Petrétei, 2018, p. 391).

The industry of fossil fuel exploration and exploitation is associated with unethical activity that has caused environmental and human insecurities, mostly in the global South, with the support of authoritarian or repressive regimes (Moody, 2007). In 2006, the UN Special Representative of the Secretary General on Human Rights and TNCs[38], John Ruggie, claimed that "*the extractive sector – oil, gas, and mining – utterly dominates this sample of reported abuses, with two-thirds of the total … The extractive industries also account for most allegations of the worst abuses, up to and including complicity in crimes against humanity, typically for acts committed by public and private security forces protecting 15 company assets and property; large-scale corruption; violations of labour rights; and a broad array of abuses in relation to local communities, especially indigenous people*" (UNCHR, 2006, p. 25).

It has been argued that the extracting industry is one of the greatest threats for the Arctic indigenous communities, as they depend on land and natural resources. Membership of an indigenous community depends on certain indigenous practices; for example, reindeer herding is an important symbol of Sámi identity and it is an exclusive right of the Sámi in Norway and Sweden. "*When extractive industries hinder such traditional ways of living, the unity and societal cohesion of the indigenous community is threatened, which in turn threatens their community security, which is the source of a unique identity*" (Petrétei, 2016, p. 158).

An interviewed Canadian academic expert on indigenous Arctic populations has confirmed that in Russia, indigenous populations are viewed completely differently from how they are viewed in Scandinavia or Canada. "*They* [the Russians] *do not have the same ethos of protecting indigenous [people]. In Russia, to be considered indigenous, your ethnic group has to have less than 40,000 people. So, for example Yakuts and Komi are not considered indigenous. They don't speak Russian but still they are not indigenous for the Russian government. They have some protection through the federal system but not through the indigenous system and that is very different from Canada or Norway. Everything is more centralised, to Russia*" (Canadian academic expert, 2017). However, a Russian affairs expert that I interviewed commented on the fact that there are Russian indigenous communities

[38] transnational corporations

with special rights in the vast Russian Arctic lands, and that their permission is needed in order to explore for gas or oil. Nevertheless, there is corruption because these communities are vulnerable. In this context, one Russian expert reflected that, "*It is easy to treat them in a nasty way. You can bribe them, they are vulnerable to alcohol, and you can find ways to make an agreement that will dis-benefit them*" (Senior lecturer of human geography, 2017).

This statement aligns with the report of UNCHR[39], which showed that the indigenous population of North-Eastern Russia have been mistreated for the benefit of the extractive industry. At the same time, it has been argued that the new Russian Arctic discourse does not depict the north as a remote and hostile region that should be 'conquered', but instead indicates that the Russian state and society treat the Arctic region as a natural and integral part of the country that should be taken care of. A more positive and attractive image of the Arctic has been developed, as it is now related with ideas of growth, prosperity and innovation. Additionally, as Sergunin argues, Russia recognises the Arctic as a region of peace and stability, where different identities can be reconciled and harmonized (Sergunin, 2018, p. 54).

Sustainable development consists of three parts: environmental, economic, and social. During the past two decades, the sustainable development principles and strategies that have been proposed by the UN and the Arctic Council have become popular among Russian academics. The Russian government and the expert community share the Arctic Council's integrated approach to sustainable development in the High North and they have established the following priorities for the Arctic Zone of the Russian Federation (AZRF):

> *i) Priorities for the economic dimension of sustainable development include: sustainable economic activity and increasing prosperity of Arctic communities; sustainable use of natural, including living, resources; and development of transport infrastructure (including aviation, marine, and surface transport), information technologies, and modern telecommunications.*

[39] United Nations Commission on Human Rights

ii) The environmental dimension has the following priorities: monitoring and assessment of the state of the environment in the Arctic; prevention and elimination of environmental pollution in the Arctic; Arctic marine environment protection; biodiversity conservation in the Arctic; climate change impact assessment in the Arctic; and prevention and elimination of ecological emergencies in the Arctic, including those relating to climate change.

iii) Priorities in the social dimension include: the health of the people living and working in the Arctic; education and cultural heritage; prosperity and capacity building for children and youth; gender equality; enhancing wellbeing; and eradication of poverty among Arctic people (Sergunin, 2018, pp. 57-58).

The concepts of human security and sustainable development have now been established within the Russian Arctic municipalities. Nevertheless, most Russian Arctic cities are not aware of the human security and sustainable development strategic documents, and the economic, ecological and social dimensions are often not harmonized with one another. The major difficulty is how to translate the words into actions, as many planned human security and sustainable development projects have not materialised. A lack of transparency in the policy planning process and a lack of co-operation within civil society institutions are the major weak points of the urban development strategies. Unfortunately, "*to a large extent, the policy planning and implementation process is still of the top-down rather than bottom-up nature*" (Sergunin, 2018, p. 69). Better co-ordination of human security and sustainable development strategies is, therefore, imperative. Yet, as Sergunin argues, "*despite the problems and shortcomings, the total 'balance sheet' of the Arctic cities' human security and sustainable development strategies and general dynamics is rather positive. The AZRF municipalities are serious about solving numerous socio-economic and environmental problems and making these urban areas better and more comfortable places to live in*" (Sergunin, 2018, p. 70).

It could be argued that, although Russia's Arctic regions have been left behind with respect to human and societal security in the Barents Region, Russia is trying to enhance the economic prosperity of its Arctic populations while taking into account the environmental and social dimensions of sustainable development. An important element of this process is

the participation of the local communities in decision-making and the implementation of these decisions.

Growing awareness of the importance of environmental security, access to health and education, food security and indigenous governance within the Barents Region is shaping future resource extraction. For that reason, these topics have become higher on the agendas of northern governments and peoples even from 2007 (Heininen & Nicol, 2007). The authors elaborated more on how climate, food, health and education are forming new security aspects. "*The real tension is in reconciling how our understanding of how environmental conditions, like climate stability or access to resources, food and health and education services, are de facto 'human rights' issues and should be calculated into any consideration of the meaning of security*" (Nicol & Heininen, 2013, p. 80).

So, it is clear that critical security studies are, even if indirectly, gaining more recognition within the security agenda. Environmental protection aspects, access to resources, food, health and education are now among the major security elements of the Barents' populations.

In Norway, the costs and benefits of Arctic development have been intensively discussed, especially in relation to the Lofoten Islands. Unlike in Canada and Greenland, in Norway it is not about indigenous versus non-indigenous populations but a discordance among fishermen and oil executives, green parties and other political institutions, corporate interests, such as Equinor, and regional and local governments. Deep-water oil and gas drilling have been postponed in the Lofoten–Vesterålen region because of their potential impact on cod fisheries and sensitive spawning grounds, yet the oil industry has significant holdings and active offshore drilling operations in the Barents Sea. What is more, many Norwegian officials believe that oil extraction has been good for Norway, and that Norway has an ideal stewardship record on oil and gas drilling (Norwegian Ministry of Foreign Affairs, 2009) because of the revenues that oil and gas reserves have provided to the Norwegian economy (Nicol & Heininen, 2013).

An interviewed professor of Arctic politics commented on the Sámi people who live in Norway, Sweden and Finland,

"*Only Norway negotiated on the Sámi and on reindeer policies and for that reason they did not join the EU. And of course, it is not only indigenous people, there are also locals, and so often in Norway they are together. It is not only indigenous environmental knowledge, is also local's environmental knowledge. Also, when it comes to fisheries, there are common interests – local fishermen and Sámi fishermen have almost completely common interests there. In the coastal areas of Norway, the interests of these two parties are very much similar*" (Finnish Professor on arctic politics, 2017).

Clearly then, Norway used a bottom-up approach when considering whether to join the EU or not by referendum in November 1994. Concerns were not only those of indigenous populations about future reindeer policies that could be imposed by the EU, but also those of local and indigenous fishermen about future policies and quotas for fishing. So, the interests of both indigenous and local populations were expressed through the referendum.

Intrigued by increasing awareness of environmental, political and social challenges facing their transnational homeland of Sápmi, Sámi people have become integral political actors in Fennoscandia, and a study of early post-Cold War security argued that Sámi "*definitely have their own specific security problems*" (Eriksson J. , 1995). The Sámi population of approximately 100,000 people live in Norway, Sweden, Finland, and Russia, and about half are Norwegian. Sámi are highly organized political actors. They have requested state recognition of their collective rights, establishment of distinct institutions, and representation within regional and European forums. The transnational Sámi Council, a permanent participant of the Arctic Council, represents all Sámi people; the establishment of Sámi parliaments in Norway, Sweden and Finland during the 1980s and 1990s met the demands of this Council for separate institutions while reaffirming their de facto separation into distinct national constituencies (Broderstad, 2011).

The Canadian expert on the Arctic's indigenous people that was interviewed pointed out a significant differentiation between the North American Arctic and the Barents Arctic,

"*The Sámi are so few compared with the populations in Canada and have been integrated for hundreds of years in their Scandinavian countries' life. They are richer, better educated and more integrated but they have less power. It is the opposite for the Canadian and Alaskan indigenous people*" (Canadian academic expert, 2017).

Similarly, a senior researcher from the Arctic Institute argued that the Sámi people are very well integrated within Norwegian society,

"*In general, they live side-by-side with the non-natives. There are some minor problems in their societies but no major problems in general. Some who live more traditionally face some problems concerning herding fields and mining, and there are key cases of dumping mining materials in northern Norway. There are no indigenous concerns on the oil and gas debate*" (Senior researcher at the Arctic Institute, 2017).

Aili Keskitalo, President of the Sámi Parliament of Norway, has stated: "*The degradation of the environment in Inuit and Saami traditional territories caused by pollution, non-sustainable natural resource extraction and climate change constitute a great threat to their traditional lifestyles and culture*" (Keskitalo, 2006). It is clear that the Sámi in Norway see the natural environment and its link to indigenous cultural practices as being at the centre of what insecurity means in their Arctic homeland (Greaves, 2016c). The ongoing expansion of fossil fuel exploitation in the Barents Region is a worrying concern to the coastal Sámi, as it could have negative effects on the fishing sector (Kristoffersen & Dale, 2014).

Norway tried to eliminate the Sámi cultural and religious distinctiveness through state policies of 'Norwegianization' until the mid-20th century (Minde, 2005), but in the past 30 years, Sámi institutions have promoted linguistic and cultural communities throughout Norway, and language has become one of the most important markers of Sámi self-determination (Greaves, 2016c, p. 471). During the Cold War, and the securitisation of the Norway–Russia border, Sámi's rights on land use were hampered as the states took security and defence decisions without considering of Sámi interests, "*so Sámi deliberately avoided*

the language of security in order to keep open their options or possibilities for resolving their struggle for political good will" (Greaves, 2016c, p. 473).

The two major issues for the Sámi are conflicts about land use, which affect their reindeer herding areas, and the preservation of Sámi language and culture. Their security is defined by protecting the environment, indigenous identity and cultural practices, and autonomy and self-determination. The establishment of institutions of self-determination in northern Norway prevents the political rights of the Sámi from being endangered. Even climate change is not a security issue per se, and it relates only to reindeer herding and other food sources. In general, Sámi do not use securitising language to describe hazards for their interests, and they do not want to securitise social and environmental issues, even though they use security language occasionally (Greaves, 2016c).

One more crucial reason that Sámi are not keen to securitise their interests is that security in Norway is still seen as a discourse within the authority of the state, mostly because the existing threats – including military conflict – are from Russia. Fear of the Russian Other has always been present in Norwegian history, and Russia affects many contemporary security policies of Norway (Åtland & Pedersen, 2008), (Pedersen, 2009), (Jensen & Skedsmo, 2010). As Jensen argues, "*Everything that smacks of 'security' acquires a very particular status in Norwegian discourses on the High North. Discourses are wrapped in history, and here in the north, close to Russia, discursive fragments from the Cold War continue to ring like echoes from the past … There is no more obvious place for prolonging a sense of paranoia and general insecurity than in relation to the High North, where Norway's national identity as a tiny, vulnerable land and the image of massive Russia ('the Russian bear') as 'the radical other' are clear and easily resuscitated in the 'collective Norwegian mind'.*" (Jensen L. , 2012, p. 90&94).

As the majority of indigenous populations around the world are disadvantaged and marginalised, "*…the UN encourages more independence for indigenous people globally. In Norway, there are already indigenous development policies*" (Senior research fellow (ii) at FNI, 2018). Indigenous people clearly have a voice in Norway. They are more sceptical than states about new observers in the Arctic Council, as they fear that they would be

overshadowed. "*Norway is more eager* [than before] *towards indigenous cooperation and protection. Indigenous are part of the Arctic identity and the international identity of Norway. The human security dimension is getting more highlighted now*" (Senior research fellow (iii) at FNI, 2018).

Sámi have not outlined their security concerns as security threats. Firstly, changing climate patterns do not present an existential threat to the Sámi community. Secondly, Sámi are integrated into Norwegian society and have the full benefits of citizenship in the only social democratic petrostate[40] of the world, and there are no claims of insecurity of the Sámi from the Norwegian state. Thirdly, the importance of Russia in Norwegian security policy means that other security issues are mostly overshadowed. Also, as a researcher from the Fridtjof Nansen Institute added,

"*most of the indigenous live in the Finnmark region of Norway, where they use the territory and are not marginalised. The Hammerfest's offshore oil field* [Goliat] *is a very important investment, creating many jobs. The oil field is a Regional issue as well, as it is a development for the whole population. Unlike in Russia or Alaska, there are no onshore activities, which can create conflicts with the indigenous populations*" (Senior researcher at FNI, Semi-structured Interviews, 2017).

The Norwegian Ministry of Petroleum and Energy has also commented on the populations of northern Norway. "*Sustainable development activities rendered enormous opportunities for employment. Local communities have made themselves relevant to these activities by supplying goods and services to oil and gas activities. So, the activities are not a threat to the population, but an opportunity for employment. Activities are bases for supplies, growing population and families. Instead of asking for challenges, ask for opportunities*". It could be argued that this point of view has an emphasis on the economic aspects of development rather than environmental. "*Bases were built for suppling the oil and gas industry, which led to population growth and indirect employment. As a result, there are more taxi drivers, restaurants, many other jobs and, consequently, more families in the northern Norway.*

[40] Petrostate: A state whose wealth stems from the sale of fossil fuels, mainly oil.

Before an area becomes open for oil and gas licensing/activities, the government produces impact assessments. And it is important that it is not just a certain environmental impact assessment, but it is a total impact assessment, as it also deals with socioeconomic challenges but also opportunities of activities. This is part of the thinking that was mentioned before – instead of asking for challenges, ask for opportunities (Norwegian Ministry of Petroleum and Energy, 2017).

The indigenous communities had to deal with abuses and injustice from the states in the past, but through international recognition, they are now more capable of securing their rights and pointing out their security concerns, which are mainly environmental and human security issues. The Norwegian side of the Barents Region has many differences from the Russian side that create different issues in relation to indigenous populations. In Norway, the main disputes onshore concern mining activities and installation of infrastructure for renewable energy rather than the oil and gas sector, which is the main source of disputes on the Russian side. By contrast, in the Norwegian Barents Sea there is much more exploration and exploitation than on the Russian side. In both countries, indigenous populations face the effects of climate change on herding and fishing activities, and the communities that depend heavily on these activities are at considerable risk.

In order to achieve greater indigenous participation in Arctic discourse, the agenda could be broadened to acknowledge and include the concerns of the indigenous populations that relate to contemporary Arctic geopolitics. In that respect, power would be counterbalanced by knowledge, physical space would be replaced by identity and resilience, and people would be the referent object rather than states. For this to be achieved, organisations that represent indigenous populations should be included in the A5[41] conferences and discussions and enhance their involvement in the A8[42]. Furthermore, the eight Arctic states should prioritise activities that would improve co-operation on Arctic aspects. For example, arguing that exploitation of fossil fuels should be done under stricter environmental standards is less reasonable than investing in and favouring the renewable energy sector,

[41] Canada, the Kingdom of Denmark (including Greenland and the Faroe Islands), Norway, Russia, and the United States.
[42] Canada, the Kingdom of Denmark (including Greenland and the Faroe Islands), Finland, Iceland, Norway, Russia, Sweden and the United States.

which would suggest an honest attempt at sustainable development. Moreover, scientific knowledge on climate change and its impacts on local, regional and global scales could be enhanced by the local, traditional environmental knowledge of the indigenous Arctic populations. In this way, regional institutions – both state and non-state actors – are very important and should be included in the discussions. Institutions such as the Arctic Council promote co-operation at the regional level on climate change, sustainable development and quality of life, highlighting that the most important elements of analysis are within the field of development rather than geopolitics. Conversant, critical and broadened discussions of northern human security is essential for the Arctic and, as a consequence, for the Barents Region (Nicol & Heininen, 2013).

It is widely accepted that the most significant changes in the Barents Region are environmental, such as disrupted and unpredictable seasonal patterns, thinner sea ice each year and thawing permafrost (ACIA, 2004), (ACIA, 2005). These environmental changes pose a risk to those who depend on nature for their livelihoods. Besides the impacts of climate change, global and local polluters, such as plastic and nuclear waste, are threatening the region and its inhabitants. In addition, food and health insecurity and high rates of alcoholism, suicide and domestic violence reduce the quality of life and wellbeing of Arctic inhabitants. Hundreds of years of interactions between humans and nature have made the Arctic what it is today and preserving this environment and ecosystem for the future generations is invaluable. It is obligatory and urgent to balance economic activities with environmental preservation if we want to provide social and human security to the next generations, as the exploitation of fossil fuels is not only the major source of pollution and a challenge to traditional uses of land, but also the main source of jobs and revenue in many Arctic regions. Though the region is connected historically with fossil fuel exploration and exploitation, more and bigger future developments of this kind could impede the security of other local communities, groups or individuals. It is vital to scrutinise the predominant societal and human security challenges of the Barents Region to obtain substantial support towards the development and implementation of targeted policies (Hossain, Martín, & Petrétei, 2018).

9.4 Avoiding a Securitised Sustainable Development

Global climate strikes held on March 15th, 2019 by more than 1 million students and young people were a call for politicians to act fast on climate change. In April 2019, climate protests in London lasted for more than a week with the aim of pushing the British government towards a more aggressive climate target than the existing target of net-zero greenhouse gas emissions by 2025. It could be argued that these actions are pushing the issues of climate change and sustainable development into high politics and even onto the security agenda. In this situation, the audience is convinced by scientists and researchers that the referent objects – the Earth's climate and development that could allow the system of the plant to continue indefinitely into the future – have to be placed further up the political agenda. Consequently, the audience is trying to convince politicians to push for stricter policies on sustainable development and climate change.

Besides environmental issues, sustainable development also refers to economic and social issues. As it has been argued in the past, sustainable development does not mean environmental preservation. Development incorporates the aspects of economic improvement that are imperative for the preservation and functionality of human societies. The concept of national security has been transformed in the age of globalisation, and the military security within a territorial area has been moved towards or even replaced by human, economic and environmental aspects. Nevertheless, any attempt to achieve sustainability in a few countries is quite inadequate if other countries are using unsustainable practices, as the environment is global and its protection needs global agreements (Dresner, 2002). In addition, it is very difficult to prove that sustainability has been achieved. Even if we could minimise or eliminate all known unsustainable activities, it is ambitious to try to deal with activities that are only suspected to be unsustainable, and it is impossible to remove all present and the future cradles of unsustainability. But ultimately, "*The alternative to the pursuit of sustainability is to continue along the present path of unsustainability, leading to disaster"* (Dresner, 2002, p. 173).

A highly politicised sustainable development could mean that the principles of sustainability – the environment, human societies and their economic prosperity – could be placed high in

the political agenda and scrutinised as a system rather than independently. However, the problems and potential solutions must be developed and introduced into the political agenda by the societies that face the difficulties, thereby combining local and scientific knowledge to create a bottom-up policy approach. If the combination of sustainability awareness in high politics and inclusion of local societies could be achieved, the possibility of sustainability would be increased.

Environmental protection must remain on the political agenda, as securitisation of sustainability issues could have adverse effects not only for the population but also the environment. As sustainability relates to environmental protection, human societies and economic prosperity, a securitised sustainable development could form a macrosecuritisation with many different aspects to be securitised for a distinctive purpose. A securitised sustainable development would not include local knowledge and scientific consultation would be limited. Using pretexts that something is contributing to or impeding sustainable development, governments could use the securitised sustainable development speech to justify an action, undermining local communities and neglecting the environmental needs of a region.

9.5 Reflections

The Barents Region is not a homogenous region. Nevertheless, there are common elements that create a common, distinct societal identity. Such elements include the geography and the traditional communities with specific norms, customs and traditional livelihoods that are based on herding and fishing. The most important issue for indigenous societies in the Barents Region is sustainability, as sustainability is the only way that they could continue to practice their traditional way of living and preserve their society. At the same time, they are enduring the challenges of climate change and economic globalisation.

The Copenhagen School of thought is useful for bringing the environmental and societal insecurity of populations in the Barents Region onto the political agenda, by broadening that agenda from military security to other forms of insecurity without securitising acts for those issues. Inclusion of the indigenous and non-indigenous populations in the formal decision-making institutions could be very helpful for balancing the interests of every actor in the

region. Accordingly, the Aberystwyth School of thought has a substantial effect on the analysis of the Region by deepening the agenda from the state level to the community and individual level, which helps to examine the societal challenges in the indigenous communities. It becomes clear now that the combination "…*of the two schools into a larger approach paves the way for a more critical engagement with security on part of the security analyst, allowing for normative – but denying infinite –conceptualisations of security*" (Floyd R. , 2007b, p. 336).

In this last chapter of my results, I outlined the contemporary environmental and societal issues within the Barents Region and how they are inherently connected. In a region with a historically important border between NATO (Norway) and Russia, securitising moves towards environment or societal issues are not going materialise because traditional security aspects would continue to exist, even in the background. Nevertheless, international and bilateral co-operation in relation to environmental protection and human prosperity in the area favours a better future for the Barents Region. Last but not least, it could be argued that contemporary critical security studies, with respect to historical and geographical aspects of the Barents Region, could add validity and enhance the outcomes of policies which try to support sustainable development in the Barents Region.

Chapter 10

Conclusion

10.1 Introduction

Understanding why the dynamics of the Barents Region are so complicated and how the analysis might differ depending on the viewpoint of the researcher is imperative for comprehending one of the most important regions of our planet, where climate change and societal challenges are wide-ranging. By drawing on concepts of critical security studies theory, geopolitics and human security, this study explored the central role of the Barents Region in the international relations between Russia, Norway and the EU, focusing on the issue of energy while stressing the importance of urgent global political action to tackle climate change and protect vulnerable societies such as the indigenous populations of the Barents Region. The main research question could be framed as: With specific reference to the Barents Sea Region, how can critical security studies facilitate an analysis of the emerging relationships between the EU, Russia and Norway in the Arctic? Three main research questions were formulated to achieve this aim.

1. In what ways can critical security studies be applied to the energy security of the EU in relation to Norway and Russia?
2. To what extent do the energy reserves of the Barents Region create inter-relations between Norway, Russia and the EU?
3. In what ways can contemporary critical security studies be used to support the development of international policies that can support sustainable development in the Barents Region?

In this final chapter, I summarise the main findings of the study and propose a series of practical recommendations. Furthermore, this chapter outlines guidelines for possible future research, acknowledges the boundaries within which the present findings should be interpreted, and outlines the contributions of this study to the field of Arctic studies and contemporary energy, environmental and societal concerns.

10.2 Key findings

10.2.1 In what ways can critical security studies be applied to the energy security of the EU in relation to Norway and Russia?

This research question was primarily addressed in the first results chapter, chapter Seven, which examined the applicability of critical security studies to the energy sector and the securitisation status of energy between Russia and the EU. As energy security is deeply interconnected with the political, military, economic and environmental sector, a totally independent energy security sector could not clearly depict the complexities of securities within a system of actors like states, companies, intergovernmental organisations, institutions and local populations. Moreover, in contemporary politics, energy security does not refer solely to the state and the economy; the definition has deepened to include the people who depend on the health of the global environment. In order to deepen the energy security agenda, the principal subject altered from the state to the people, to smaller societies or communities. Consequently, rather than attention being fixed on national energy security and military uses of energy, analysis has deepened towards the impacts of energy insecurity on marginalised communities.

Application of critical approaches to energy security brings forward aspects such as justice, equity and sustainability and also provides a different way of thinking that opposes militarism, wars and unsustainable development, which are inherently connected with the traditional definitions of energy security. To critically scrutinise the three major questions of security – 'for whom?', 'from what threats?' and 'by what means?' – the referent object must be the marginalised individuals and communities. Moreover, a critical perspective ought to point out the existing injustices within the social and political structures that perpetuate inequality. The answer to the first question is straightforward, as the focus of security is now on the individual or the community. In answer to the second question, the threat consists of inadequate energy supplies and inequitable social and political structures. And the answer to the third question is that the means are political and economic reforms, which enable the elimination of such architectural inequalities.

Although energy securitisation is not a powerful securitisation per se, the association of energy with environmental, economic, military and human security enables the creation of a macrosecuritisation framework. Within this framework, the researcher can analyse each securitisation separately while scrutinising the possible effects on the macrosecuritisation system if the status of an internal securitisation changes.

Desecuritisation, macrodesecuritisation and, ultimately, preventing an issue from being securitised in the first place are the main concerns of critical security studies. In particular, keeping the energy sector at the political level is crucial for international relations, economy and public prosperity. The EU, despite many difficulties, has managed to keep the energy agenda at the political level through a number of measures and policies, most of which have focused on diversification routes, such as LNG terminals and new pipeline projects. Moreover, the EU has emphasised development of renewable sources of energy, as they produce energy domestically. This emphasis on renewables also serves contributes to another major goal of the EU, which is to tackle climate change by reducing CO_2 emissions as part of worldwide attempts to limit global warming temperatures below 1.5°C, or 2°C in the worst scenario. In chapter Seven, the interconnection between energy and environmental security became apparent.

Desecuritisation equals politicization and is easier to achieve through a lack of security speech than through a new speech in an attempt to confirm desecuritised status. For example, lack of speech or no mentions of an issue from media, political elites and think tanks could help towards the desecuritisation of an issue. For Russia to keep the energy agenda at the political level, it must act towards reconstruction of its internal energy policy structure. Yet, they have the potential of using energy as a strategic aspect that combines political and commercial components. At the European level, five major policy points were initiated to keep energy desecuritised, which related to: good function of the internal energy market and the interconnection of energy networks; security of energy supply within the EU; enhancing energy efficiency and energy saving; endorsing development of new and renewable forms of energy; and supporting research, innovation and competitiveness. A comprehensive and coherent European energy policy is the best way to keep energy desecuritised within the European Union.

The remaining issues and dialogue in relation to energy securitisation between the EU and Russia do not favour energy trade development. Futile relations will continue to exist and grow if the EU and Russia disregard the energy needs of the other party. It is clear that there is a high dependence between the EU and Russia. For example, in 2009, Russia provided about 40% of the total energy consumed in the EU (Leal-Arcas, 2009, p. 351), including over half of the EU's gas and over 33% of its oil is provided from Russia. Similarly, Russia was the EU's main supplier of crude oil, natural gas and solid fuels in 2016 (Eurostat, 2018). Conversely, Russia depends on the EU for economic profits from energy sales and for technological advancements, which become available through EU investment. For these reasons, it has been justifiably argued that a significant reduction of the interdependence between Russia and the EU is implausible in the foreseeable future (Proedrou, 2012, p. 77).

Maintenance of energy desecuritisation is the best way to allow the market to do its job. "*Over-politicization of natural gas as 'security problem' leads to non-market behaviour (e.g. exclusion of specific sources), higher prices and increases investment costs*" (Fischer, 2016).

10.2.2 To what extent do the energy reserves of the Barents Region create inter-relations between Norway, Russia and the EU?

This research question was addressed in Chapter Eight, in which I examined the inter-relations that the Barents Region is creating among Norway, Russia and the EU at an energy and geopolitical level.

An interesting finding on the role of Norway in the energy sector of the EU emerged from the narratives of four different people who I interviewed. Two of these interviewees argued that Norway influences the energy strategies of the EU, even if indirectly, whereas the other two said they were disappointed by the fact that Norway does not have a significant influence on the EU in terms of energy. Whether Norway's influence is considered high or low could depend on the subjective opinions of different interviewees, so I kept only the objective information, which is that Norway has some degree of influence on the energy strategies of the EU.

On the basis of the first EU policy reports on the Arctic and the Barents Region published in 2008, there seemed to be a lack of clarity about role of the EU in these regions. Only after 2012 were the communications of the EU in relation to the Arctic based on more rational discourse. In 2014, the annexation of the Crimean Peninsula led to EU sanctions on Russia that related to Arctic offshore drilling and advanced technologies. As many Russian projects in the Barents Sea have stopped as a result, the EU's attempts to gain status as a permanent observer of the Arctic Council has been vetoed by Russia. Nevertheless, it has been argued that, "…R*ussia has so many resources onshore, like Yamal LNG, and they do not need to go offshore...*" (Associate fellow at FNI, 2018). These events demonstrate how external geopolitical developments indirectly affect the Barents Region and, in turn, how the Barents Region creates new political realities between Russia and the EU.

The debate and conflict created by the Nord Stream II project made clear that the gas trade is politicised in the EU and that European officials have an outdated view of energy security that focuses on the security of supply. By contrast, contemporary energy security policies must consider that energy security requires a combination of affordable and unimpeded energy sources that are environmentally acceptable, not politicised and based on a free market economy.

It has been observed throughout the thesis that the EU has an active role in the Barents Region, mainly focused on environmental and human protection. The EU is a major investor in the Barents Region, providing funding and creating policies in the sectors of biodiversity, chemicals and transboundary pollution, climate change, energy, fisheries, forestry, tourism, transport and Arctic indigenous and local livelihoods. In addition, between 2008 and 2017, the EU published more than 10 Arctic policy papers, which establishes it as an Arctic actor. Therefore, the Barents Region binds together the three major actors – Norway, Russia and the EU – at multiple levels and in different sectors, the most prominent being environmental protection, maritime shipping and the prosperity of Arctic populations.

A final insight developed in Chapter Eight relates to the contemporary geopolitics of the Barents Region, which provide a significant global example of how the politics of a region can transform from confrontation to co-operation. Through the arguments of Dodds &

Sideway in 1994, who argued that "*the circulation of geopolitical ideas depends on the production and dissemination of strategic text and maps*" (Dodds & Sidaway, 1994, s. 518), and of Müller in 2012, who argued that "*sovereignty is enacted through the continuous performance of summits, meetings and issuing of documents and statements*" (Müller, 2012, s. 381), a connection can be observed between securitisation theory of speech act, in which securitisation is attempted through speech, and geopoliticisation, as it happens through the same actions. Nevertheless, traditional geopolitical theories that are based mainly on geography and space are no longer able to fully incorporate all contemporary aspects of the Barents Region. For this reason, discourse analysis was a major aspect of my analysis of geopolitical data, as advocated in the critical geopolitics' theory. Through this discourse analysis, it became clear that the geopolitical realities among Russia, Norway and the EU are changing, and that we must focus on the upcoming challenges rather than maintain our focus on the old ones. These upcoming challenges, which concern all actors in the Barents Region, include the geopolitics of new carbon alternatives and the dissemination of renewable energy, digital security and geoeconomics.

By enhancing the role of intergovernmental institutions that promote co-operation and constructive dialogue, the Barents Region could flourish in the coming years through the enhancement of democratic values and sustainable development.

10.2.3. In what ways can contemporary critical security studies be used to support the development of international policies that can support sustainable development in the Barents Region?

This research question was addressed in Chapter Nine. The purpose of the Chapter is to apply the critical security theories analysed earlier to two aspects of great importance for the Barents Region – environmental security and societal security.

In Norway, and specifically Northern Norway, widening of the security agenda at the Barents Region from military security to environmental and human security happened at the beginning of the new millennium. At this time, radioactive waste and environmental pollution posed an immediate threat to the environment and the local populations.

Almost globally, oil prices and production are decreasing while resistance to oil production is increasing owing to environmental concerns. Nevertheless, by examining environmental security through critical security studies, it becomes apparent that the environment of the Barents Region is threatened by endogenous and exogenous sources. Even if the endogenous threats, which include fossil fuel exploitation, the maritime shipping industry, the fishing industry, plastic and nuclear waste contamination, could be controlled through legally binding, globally legitimate, legal frameworks, the environmental insecurity that results from those threats could not ultimately be eliminated. Important to stress is that exploitation of fossil fuels is not a threat only to the environment of the Barents Region, as an accident could ruin vast sea areas that are very important for fishing. The extraction industry also represents an exogenous threat to the region, as the exportation and global use of fossil fuels contribute to the increase of CO_2 emissions, climate change, and the rising temperatures that lead to shrinking of the sea ice extent and thawing of the permafrost. It is therefore plausible to argue that advocating energy production from renewable sources is the best way to secure both environmental security in the Barents Region and energy security within the EU.

Environmental security and sustainable development in the Barents Region are very significant for the population who live within the region and who depend on the environment for their livelihoods, as the President of the Sámi Parliament of Norway, Aili Keskitalo, has argued. For those traditional communities that depend on their societies, human security does not relate to the individual but to the inter-relationship among individuals, their communities and the state (Rothchild, 1995, p. 61). Whilst Norway protects and supports the Sámi communities, in Russia "*national politics aiming at securing the whole (national) population can be seen as opposing*[43] *locally based security*" (Kristoffersen & Dale, 2014, p. 215), with many indigenous communities having been mistreated or not even recognised as indigenous populations at all. By utilising human and, ultimately, societal security within the Barents Region, we can hear and advocate several voices and perspectives.

[43] Italics in the original

Critical security studies demonstrate the deep interconnections between environmental and human security within the Barents Region, and Norway, Russia and the EU must co-operate on these aspects, leaving aside their differences on other political or geopolitical issues, to protect the environment and, consequently, the populations of the region. If hard security is absent from the most important intergovernmental institutions, co-operation between the EU, Norway, Russia and Arctic organizations of indigenous peoples can be promoted to achieve sustainability and human security. Keeping the major issues in the Barents Region off the security agenda and within an inclusive political level is crucial for sustainable development of the region, which will benefit the environment, the populations and, ultimately, the planet.

10.3 Evaluation of the Study – The Significance of the Work

This research was interpretive in nature, using open-ended, semi-structured interviews with experts, discourse analysis of policy documents, and use of the Copenhagen and Welsh Schools of thought of international relations. Due to the nature of the interviews, the sample was relatively small but diverse. The diversity of the sample was an advantage, as it allowed for a variety of views to be expressed and examined, in tandem with the intention of the study, and provided insight into the inter-relations that the Barents Region is creating between Norway, Russia and the EU. One limitation of the sample was the lack of Russian officials, although this was counterbalanced to some extent by inclusion of Russian academics and researchers who specialise in Russian affairs. Future research might benefit from including Russian officials, NATO officials, representatives of indigenous populations and representatives of NGOs.

Arctic studies research, as a subfield of the multidisciplinary topic of human and political geography, must focus on the specific issues of each Arctic sub-region instead of treating the Arctic as one homogenous region. For example, my analysis on the Barents Region cannot be applied to the Greenland–Canada or Alaska Arctic regions, as the human and political elements of these regions are different. On the other hand, environmental

problems, which are indisputably apparent in the Barents Region and within the Arctic, can be mitigated at local and international level.

While the research design was largely successful in providing an insight into the security aspects of the Barents Region and the role of Norway, Russia and the EU in the region, the work might have benefitted from improvements in some areas. Future research might benefit from including an equal number of interviewees from each actor and inclusion of Russian officials, NATO officials, representatives of indigenous populations and representatives of NGOs.

Data triangulation was achieved by comparison of policy papers, media reports and data from the qualitative research. As previously indicated in Chapter Six, methods were selected in the belief that they would adequately engage a broad range of experts. The large diversity of the sample required methods that were suitable for a range of experts. These methods worked adequately for the experts included in the study, but the level of engagement within and across the experts varied noticeably. Some experts focused on the questions they considered most important or to which their expertise was most closely related and did not elaborate much on other questions. Nevertheless, the methods used enabled me to gather the experiences and insights of experts regarding the ongoing multidisciplinary situation in the Barents Region, including the energy security of the EU, geopolitics among Norway, the EU and Russia, energy exploitation and environmental and human security.

Alternative methods, specifically quantitative research through quality questionnaires, might have aided in engaging more experts in the study. Russian officials and multinational corporations might also have been more inclined to participate if greater attention had been given to approaching them and designing unique questionnaires for them from the outset. Different levels of capacity and research interests would necessitate a toolbox of possible methods. In other words, a range of different strategies and methods should be employed in future research in order to engage more experts.

10.4 Implications for Policy

Although the term “critical human geography” is not used explicitly in this thesis, many aspects of the research could contribute to the field of critical human geography by adding features of emancipation and progressive social change. Scrutinising geographical aspects of human and environmental protection through the scope of critical security studies of international relations could enhance geographical analysis by offering a more spherical point of view that takes into account political complexities and political will. As mentioned above, this research is not intended to criticise different theories or methods of analysis but, on the contrary, to point out beneficial outcomes from combining different methods and theories. In this way, aspects that may be neglected in one theory or method can be addressed through the complimentary method or theory. In addition, (critical) human geography through the lenses of critical security studies, and vice versa, could enhance our ability to desecuritise and prevent securitisation of political aspects. Thus, it will enable us to promote fruitful political discussion and sustain our democratic values.

How we perceive security depends on our understanding of potential threats through our everyday stimuli. Energy security in the EU has fluctuated within the political agenda during the past two decades, and the Barents Region was perceived as a potential source of adequate energy to cover the needs of the EU. However, this hype has almost gone and researchers and policy makers from diverse fields of expertise must refocus on the upcoming security issues of the Barents Region, such as environmental and societal security.

The modern practices and new technologies that are applied to energy, environmental and human security, are all relating to the new critical perception of security and are deeply connected with our contemporary understanding of what poses an existential threat. This has particular implications for policy interventions in those practices, which are based on valued theories and perceptions and may prove resistant to change.

I have demonstrated that the energy reserves of the Barents Region are very important for the economic prosperity of the reserve holders, namely Norway and Russia. As long as energy flows remain low in the political agenda, those reserves, especially natural gas, could

help the EU reach its early targets for reducing CO_2 emissions until the probable dominance of renewable energy sources in future. While the energy sector in the EU is depoliticised through diversification, internal interconnectors and renewables, policy makers must turn their attention to environmental and human protection issues not only within the EU but also within the adjacent neighbourhood of the Union, including the Barents Region and the Mediterranean.

One more noteworthy finding of relevance to policy relates to the ability of the EU to desecuritise issues, and that is a core component of its magnetism. The credibility of the EU's policies on contemporary issues such as energy security, environmental protection and human security (concerning sensitive communities within the European territory and massive external migration) depends on its response to those crucial issues. Notably, including climate change in security discourse could lead to inappropriate measures and actions that have been decided upon by political agencies rather than through serious political dialogue (Swyngedouw, 2010).

Energy security of the EU remains an integral part of its economic security and an indispensable component in the analysis of human and environmental insecurities in the Barents Region. The pursuit of energy security for the EU must not marginalise the local communities where the energy originates or create adverse environmental effects for them. Traditional definitions of energy security that relate to militarisation, war and unsustainable development through the use of terms of urgency and through the justification of irregular political proceedings, must continue to be replaced with policies that enhance social justice, equity for the local indigenous communities, and sustainable development. Ultimately, in this context, the 'for whom?' question of critical security refers to marginalised communities both within the EU and in Barents Region. The 'from what threats?' critical security question refers to sufficient energy supplies for the EU community and to environmental and societal security for the Barents Region community. Finally, the critical security question 'by what means?' relates to policy reforms at the economic, environmental and societal levels in order to minimise structural inequalities and promote sustainable development.

10.5 Implications and Future Directions for Research

As my study is of an exploratory and interpretive nature, it raises several opportunities for future research, both in terms of theory application and geographical concept validation. More research will be necessary to refine and further elaborate on my initial findings concerning the interconnections between the energy security of the EU and the societal and environmental security of the Barents Region.

Moreover, my study offers the opportunity to refine and validate the concepts and constructs that emerged from my composite analysis of critical security theory and geographical places. For example, the idea of societal security will need further refinement and elaboration, in terms of both its component elements and its internal dynamics. One could also ask whether and to what extent it is possible to identify the emerging political geographies or even the geopolitics of the energy transition towards renewable sources, and how they are creating new types of interrelations and modes of governance.

While this thesis has created a number of new and useful insights on the importance of the Barents Region among the EU, Norway and Russia, the fact that the in-depth research strategy focused on interviews with experts and policy reports, very little can be said of the attitude of Russian officials owing to the lack of responses. My study could thus be extended in search of Russian insights and further emphasise the energy market economics within the EU while not neglecting the human and environmental concerns of the system under analysis.

Co-operation and productive discourse would result in developing a model response system to situations that are expected to occur, either in political or environmental contexts. I am hoping that the published results of the thesis will be the basis for further investigations in the coming years, aiming to unfold the geopolitics of energy transition and reveal the opportunities and the challenges that it brings. Finally, the findings could also be adopted for regions with similar difficulties, including maritime borders between countries in the Mediterranean, Southeast Asia, and other disputed areas globally.

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Appendix

Support Letter from Supervisor

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13 June 2018

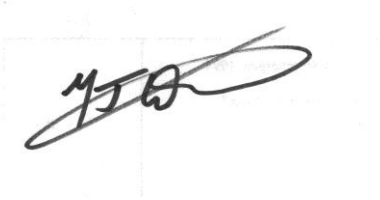
Dear Mr **********,

I am writing in my capacity as the supervisor overseeing Matthew Melas's PhD studies. Matthew has been studying with us here at Aberystwyth University for 18 months. Due to the interdisciplinary nature of Matthew's PhD he is actually being jointly supervised by staff in the Department of Geography and Earth Sciences and the Department of International Politics.

Matthew's project has been developing well and I feel sure will make an important contribution to both academic debates and policy deliberations concerning energy security in the EU and the Arctic. Completing an interview with yourself would be a vital part of Matthew's PhD and will contribute in significant ways to his findings.

If you have any further questions you would like to ask me then don't hesitate to get in touch.

Yours faithful



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Aberystwyth University Ethics reference number: 5639.

Letter of Interview Invitation

Dear …….

Please excuse my writing to you out of the blue. My name is Matthaios Melas and I am a second year PhD student at Aberystwyth University in the United Kingdom. My research is focused on i) the likely impacts of Norway and Russia's Arctic policies on the European Union's energy security in the Twenty First Century and ii) the potential of securing the energy demand of the European Union with reserves of gas from the Arctic.
At this stage of my research I would like to conduct interviews in order to add originality and credibility in my project. University's professional research ethics and anonymity will be kept during the research and in the final results.
Your crucial role in the …… ……. as ……. ……. makes you an exceptional specialist in the field of my research and I would appreciate it if we could meet for an unconstructed, open-ended questions interview at a place convenient to you or through Skype. Otherwise I could send you a set of questions to answer, if that is more preferable.
My two basic research questions are about to what extent (if any) do Norway and Russia influence the European Union energy strategy and in what ways is the Arctic likely to become a key factor in the European Union strategic energy relations with Norway and Russia. Having these questions as a start we could then freely continue the conversation on that matters.

Thank you very much for your time.

Yours sincerely,
Matthaios Melas

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Questions for Norwegian participants

1. How does Norway prioritise its energy exports agenda (security of demand)?

2. Does Norway have a significant influence (in terms of consultation and greener energy solutions) on the European Union energy strategy?

3. Could Norway realistically compete/replenish the Russian exports of natural gas in Europe?

4. In your belief, to what extent could the Arctic be a key factor in European Union strategic energy relations with Norway?

5. From your point of view, how do you anticipate the Arctic future in relation to energy? A boiling pot or a field of further cooperation? What are the key steps for the latter outcome?

6. Do you believe that the critical infrastructure of energy (gas and oil pipelines, LNG ships and terminals) are adequately protected in the EU and between the EU and Norway?
   - To what extent could critical infrastructure be more effectively protected?

7. Along with energy and environment how the indigenous population of the Arctic could be protected/assured in terms of customs, communities and unemployment?

8. In your belief what policy the European Union could follow in order to maximise its energy security and how do you anticipate the role of Norway and the Arctic in it?

Questions for Russian participants

1. How does Russia prioritise its energy exports agenda (security of demand)?

2. Does Russia have a significant influence on the European Union energy strategy?

3. In your belief, how the Arctic could be a key factor in European Union strategic energy relations with Russia?

4. From your point of view, how do you anticipate the Arctic future in relation to energy? A boiling pot or a field of further cooperation? What are the key steps for the latter outcome?

5. Along with energy and environment how the indigenous population of the Arctic could be protected/assured in terms of customs, communities and unemployment?

6. In your belief what policy the European Union could follow in order to maximise its energy security and how do you anticipate the role of Russia and the Arctic in it?

Questions for EU participants

1. How could you prioritise the key issues in the energy security of the European Union?

2. To what extent do Norway and Russia influence the energy strategy of the European Union?

3. In what ways is the Arctic likely to become a key factor in European Union strategic energy relations with Norway and Russia?

4. Do you believe that the critical infrastructure of energy (gas and oil pipelines, LNG ships and terminals) are adequate protected in the EU and among the EU, Norway and Russia?
   - To what extent could critical infrastructure be more effectively protected?

5. Could the energy discussion take place in political or in security/military level? Others argue that energy and energy infrastructure should not be connected with any political discussion and leave the markets to do their job.

6. Do you believe that the "Energy Union" is stronger than the political and economic union among the EU members?

7. In your belief, what policy could the European Union follow in order to maximise its energy security and resilience?

Questions for "Neutral" participants

1. How could you prioritise the key issues in the energy security of the European Union?

2. To what extent do Norway and Russia influence the energy strategy of the European Union?

3. In what ways is the Arctic likely to become a key factor in European Union strategic energy relations with Norway and Russia?

4. Do you believe that the critical infrastructure of energy (gas and oil pipelines, LNG ships and terminals) are adequate protected in the EU and among the EU, Norway and Russia?

5. Could the energy discussion take place in political or in security/military level? Others argue that energy and energy infrastructure should not be connected with any political discussion and leave the markets to do their job.

6. Do you believe that the "Energy Union" is stronger than the political and economic union among the EU members?

7. In your belief, what policy could the European Union follow in order to maximise its energy security and resilience?

8. Does Norway have a significant influence (in terms of consultation and greener energy solutions) on the European Union energy strategy?

9. In your belief, to what extent could the Arctic be a key factor in European Union strategic energy relations with Norway?

10. From your point of view, how do you anticipate the Arctic future in relation to energy? A boiling pot or a field of further cooperation? What are the key steps for the latter outcome?

11. In your belief, what policy the European Union could follow in order to maximise its energy security and how do you anticipate the role of Norway and the (Norwegian) Arctic in it?

12. Does Russia have a significant influence (in terms of consultation and greener energy solutions) on the European Union energy strategy?

13. In your belief, how the Arctic could be a key factor in European Union strategic energy relations with Russia?

14. Along with energy and environment how the indigenous population of the Arctic could be protected/assured in terms of customs, communities and unemployment?

15. In your belief, what policy the European Union could follow in order to maximise its energy security and how do you anticipate the role of Russia and the (Russian) Arctic in it?

Interviews' Anonymisation

Interviewee	Code in the project
1. Expert's Name	Professor on arctic affairs
2. Expert's Name	Canadian academic expert
3. Official from the EU energy department	European official on energy security
4. Official from the EU energy department	European official on Russian affairs
5. UK Department of Business, Energy & Industrial Strategy	UK Department of Business, Energy & Industrial Strategy
6. Expert's Name	Senior researcher at the Arctic Institute
7. Expert's Name	Professor on global energy
8. Norwegian Ministry of Petroleum and Gas	Norwegian Ministry of Petroleum and Gas
9. Expert's Name	Senior researcher at FNI 2017
10. Expert's Name	Norwegian energy consultant
11. Expert's Name	Professor of economic geography and geopolitics
12. Expert's Name	Russian academic expert
13. Expert's Name	Senior research fellow (i) at FNI
14. Expert's Name	Associate fellow at FNI
15. Expert's Name	Senior policy analyst at FNI
16. Expert's Name	Researcher at FNI
17. Expert's Name	Research Professor at FNI
18. Expert's Name	Senior policy analyst at FNI
19. Expert's Name	Senior research fellow (ii) at FNI
20. Expert's Name	Senior research fellow (iii) at FNI
21. Expert's Name	Senior researcher at FNI 2018